

THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

VOLUME XXXIX

NOVEMBER 1931

NUMBER 9

Educational News and Editorial Comment

CENSUS RETURNS ON ILLITERACY AND SCHOOL ATTENDANCE

Two recent releases of the United States Bureau of the Census are of peculiar interest to educators. These deal with the extent of illiteracy and with school attendance. As in each case the releases include a comparison of the situation in 1930 with that in 1920, it is possible to note progress in the intervening decade.

The percentage of persons ten years of age and over reported to be unable to read and write in 1930 is 4.3, a decline from 6.0 per cent in 1920. Illiteracy in the white population dropped from 4.0 per cent to 2.7 per cent; in the negro population, from 22.9 per cent to 16.3 per cent; and in all other races, from 25.6 per cent to 25.0 per cent. In 1930 the percentages of illiteracy in the North, South, and West were, respectively, 2.7, 8.2, and 2.7.

We may be permitted a measure of pride that some progress has been made toward general literacy of the populace. At the same time, the figures for 1930 disclose ample ground for humility, particularly when account is taken of the criterion of literacy applied by the census enumerator. His directions were: "Write 'Yes' if the person is able to read and write in *any* language; otherwise 'No.' " It would be out of the question to expect the run of enumerators to

administer a real test of ability to read and write. The criterion varies with the respondent's notion of what constitutes the ability to read and write and must often drop as low as being able to identify a few words of print and writing one's name, if not lower. The percentage of virtual illiteracy must, therefore, be larger than is shown in the census returns.

This point of view of the inadequacy of the measures of literacy is not put forward to urge the Bureau of the Census to undertake the stupendous task of administering an acceptable test of literacy to the entire populace of the country. Perhaps it would be unreasonable, despite the manifest dependence of democracy on true literacy, to expect this agency of the national government to carry its inquiries to such a point. Because responsibility for education rests with the states rather than with the nation, the task of ascertaining accurately the extent of illiteracy may quite properly fall to the states. The obligation of those in charge of education within the states is not to accept the census figures as adequate measures of literacy but rather to investigate the problem anew with a view to setting up and carrying out a program aiming at universal literacy.

The release of the bureau concerning school attendance gives (1) the total population in certain age groups and (2) the numbers and percentages of these same groups reported by the enumerators as attending school. Figures of particular interest to those concerned with secondary education are the percentages for the portion of the population of high-school age, that is, those who were fourteen, fifteen, sixteen, and seventeen years of age. The percentage of the persons in this age group for 1930 who, according to computations based on these figures, "attended school or college at any time since September 1, 1929," is 73.1. The corresponding percentage for 1920 is 61.6. Because the inquiries for the two census periods were made by identical procedures, the large increase during the decade in the proportion reported to be attending school is significant.

Without doubt, this increase indicates substantial progress toward popularization of education at this age level. However, just as in the case of the evidence concerning illiteracy, too much confidence may easily be placed in the actual percentages. A record of the fact that a given individual had "attended school or college at any time

since September 1, 1929," gives no hint of the length of his attendance nor of the nature of the institution attended. Here again we may urge that, if authorities within the states desire information requisite to the mapping-out of educational programs, they will need to make their own investigations of the present situation in school attendance.

THE PROGRESS OF JUNIOR HIGH SCHOOL REORGANIZATION

From time to time one meets in educational discussion with unfounded assertions to the effect that the junior high school is losing ground, that school systems are abandoning the plan, that few new systems are committing themselves to this reorganization, or that interest in the movement is waning. Usually these assertions have their source in persons who have never understood the movement nor appreciated its significance. Sometimes the statements are sheer rationalizations of school heads who see great obstacles to early reorganization in the systems of which they have charge.

An emphatic challenge to these assertions is provided in a section entitled "Reorganization" in the forthcoming chapter on "Secondary Education" prepared for the *Biennial Survey of Education in the United States, 1928-1930*, by Carl A. Jessen, specialist in secondary education for the United States Office of Education. We quote most of this section as it will appear in the published report. The evidence sets forth the growth of the movement to 1928. The Statistical Division of the Office of Education and the National Survey of Secondary Education are collaborating in a more intensive study of the growth during the biennium 1928-30, and, although few definite figures can be cited at this writing, the reader may be assured that junior high school reorganization has proceeded.

In 1928 the Office of Education had record of 4,885 reorganized high schools, that is, high schools which due to a reorganization of units were no longer parts of a system having an elementary school seven or eight years in length followed by a four-year high school. This figure exceeds by 1,341 the number of schools which two years earlier reported that they had abandoned the 7-4 or 8-4 plan for some type of reorganization. The biennium before that showed an increase of 996 in the number of reorganized schools. The percentage of increase is lower with each succeeding biennium, but the actual gain in the number of reorganized schools is steadily rising. The trends since 1922 may be studied in Table I. Comparable data for the years before 1922 are not available.

It is apparent that the segregated school is found in increasing numbers. Consistent and significant gains have been registered since 1922 for schools which are units by themselves, namely, junior high schools and senior high schools. Non-segregated schools, included in the table as junior-senior high schools, show only slight gain in numbers.

The most convincing increase has occurred in the case of undivided, that is, five-year and six-year, schools. Their number more than doubled during the biennium 1926-28. Losses occurred in only four states; no one of these states had any considerable number of such schools. Increases were distributed over forty-one states and were most pronounced in those states which in 1926 had the largest number of undivided schools. Four states (Indiana, Michigan, Ohio, and Pennsylvania) in 1926 had 356 undivided schools; these same states had a

TABLE I
NUMBER AND TYPES OF REORGANIZED HIGH SCHOOLS
BY BIENNIUMS, 1922-28

Type of School	1922	1924	1926	1928
Junior.....	387	879	1,127	1,566
Senior.....	91	181	414	632
Junior-senior.....	1,088	1,383	1,407	1,486
Undivided (five-year and six-year).....		105	596	1,201
Total.....	1,566	2,548	3,544	4,885

total of 558 undivided schools in 1928. In 1926 there were only four states (the ones already mentioned) which had twenty or more undivided schools; in 1928, fourteen states had twenty or more such schools. The trends indicate that the undivided school will shortly displace the junior high school as the reorganized school most frequently found.

The growth in the number of undivided schools is an indication that the reorganization movement is finding its way into smaller school systems. The junior and senior segregated schools have been developed principally in larger centers. Examination of the lists from which Table I was prepared quickly reveals that the undivided schools are located more often in smaller communities. In this connection it is of interest to note that the average of the enrolments in reorganized schools for 1928 was 401 pupils, a decrease from an average enrolment of 423 in 1926. Thus the trend in enrolment of reorganized schools is in the opposite direction from that observed to be operative in high schools generally. . . .

Comparison of Table II [not reproduced here] with the similar table for 1926 . . . shows that a loss in the number of reorganized schools occurred in only two states, namely, Louisiana and New Hampshire; the total loss was negligible

—six schools in the two states. The increases are decisive. In 1926 eleven states had more than one hundred reorganized schools; in 1928 seventeen states are so classified. In 1926 five states had more than two hundred reorganized schools; by 1928 seven had passed this mark. No state in 1926 had as many as three hundred reorganized schools; four states had by 1928 exceeded this figure by a considerable margin.

The detailed classification into types of reorganized schools reveals the three-year junior high school of Grades VII-IX to be ascendant in its class, the three-year senior high school of Grades X-XII outstripping all competitors in its group, and the six-year high school of Grades VII-XII dominant among undivided schools. These three types predominated also in their respective classes in 1926. No pronounced movement is apparent in the junior-senior schools but a tendency toward the 3-3 plan consisting of Grades VII-IX and X-XII is discernible.

Because of enrolments and their importance special interest attaches to status and trends of reorganization in larger cities. In Table III [not reproduced here] is presented a summary of data secured for the school year 1929-30 in one of the studies conducted as a part of the National Survey of Secondary Education. The returns, while incomplete, cover responses from 55 cities of 100,000 population and from 102 cities of 30,000 to 100,000 inhabitants.

It is of significance to note that only 26 of the 157 cities have taken no steps looking toward reorganization, while 79 report themselves entirely on a reorganized basis. Seventeen per cent of the cities have no reorganized schools, 50 per cent have all schools on a reorganized basis, and the remaining 33 per cent are in various stages of reorganization. In four-fifths of the cities at least one-half of the pupils are attending reorganized schools.

No one would contend that all the reorganization represented in these figures is thoroughgoing. Plenary reform is not characteristic of movements at this early stage. Most schools, even among those traditionally organized, are far from achieving the best possible for the type of organization they represent. The evidence, nevertheless, indicates increasing committal to reorganization—a committal which in many instances has been or will be followed by genuine reorganization.

THE JUNIOR HIGH SCHOOL CURRICULUM IN THE STATE OF NEW YORK

From the State Education Department of New York comes a publication dealing with the curriculum in the junior high school (*Courses of Study and Curriculum Offerings in Junior High Schools in New York State*). This is not a bulletin of recommended courses

of study but rather a description of current practices in junior high schools of the state. Space in the publication is shared almost equally by the two parts, the "Analysis of Junior High School Courses" and "Progressive Practices in Junior High School Courses of Study." The first part, prepared by Warren W. Coxe and Joseph A. Baer, of the Educational Research Division of the department, is based on an analysis of the content of textbooks used in all the junior high schools of the state, statements by teachers of the main topics of the courses, assignments made to individual members of classes, activities of clubs related to the courses, and the aims reported for the courses. In this part are represented all junior high school subjects except physical training. The second part, credited to Harrison H. Van Cott, supervisor of junior high schools, and George M. Wiley, assistant commissioner for secondary education, consists in descriptions of constructive and innovating practices in individual schools. Here again practically the full round of subject fields is represented. One has difficulty in deciding which of the two parts is more useful—that which reports on the full scope of the work given in many schools or that which reports the high lights in individual schools only. Both are suggestive to the teacher or administrator of inquiring mind, but the descriptions of innovating practices are more stimulating. The bulletin will be frequently consulted, not only in New York, but in other states as well.

CURRICULUM RECONSTRUCTION IN MINNESOTA

The Department of Education of the State of Minnesota has just issued the first number in a new series of bulletins dealing with the secondary-school curriculum and growing out of an extended program of curriculum reconstruction. Bulletin No. 1 is designated as the "Introduction" to the series, remaining numbers of which will treat the different subject groups.

The organization for the work of revision included an executive committee, with E. M. Phillips, state director of high schools, as chairman; a secondary-school council, consisting of the executive committee and the chairmen of the subject-group committees, and a "correlation committee," designed to foster articulation of elementary-school and secondary-school curriculums and correlation of the

different subject groups with each other. The committees on the subject groups were fourteen in number as follows: English, social science, geography, science, mathematics, foreign languages, commercial subjects, art, music, agriculture, home economics, general industrial training, physical and health education, and library. The personnel of these committees has been drawn from the state department of education, teachers and administrators of local school systems, and from the University of Minnesota.

One of the most significant features of the program of revision is the plan to work out the curriculum for a six-year period of secondary education, although the eight-four organization of schools is still the most common in the state. The bulletin presents the following brief but adequate justification of this plan.

While the junior-senior organization of high schools is not yet the dominant type, still the ideals of junior high school reorganization are increasingly influencing both the administration and the instruction in the seventh, eighth, and ninth years of the public-school period. In view of these facts, the present responsibility will be to prepare a curriculum and syllabi for effective use in Grades VII-XII, inclusive, of any school system, regardless of the type of organization maintained.

The publications dealing with the different subjects will be in three groups: (1) for certain subjects, mostly general, at the junior high school level; (2) for most of the same subjects at the senior high school level; and (3) for certain subjects, mostly special, for both junior and senior high school periods.

Bulletin No. 1, in addition to these preliminary materials and a list of definitions useful in understanding the proposals, includes a consideration of objectives which distinguish between elementary and secondary education and also between junior high school and senior high school education, a consideration of the question of constants and variables for junior and senior periods separately, and a consideration of the principles of program and curriculum arrangement. There are "suggested" programs of studies for different classes of schools, including a "transition program" for junior high school grades designed to be helpful in making the shift from the conventional curriculum to that mapped out in the revision. There are sections also on methodology in secondary schools, state exami-

nations in relation to the revised curriculum, physical and health education, civic-social-moral education, the library in the secondary school, art education, music, and allied activities. One of the most constructive portions is that presenting certain "principles of program and curriculum arrangement" which are here quoted at length.

1. Sequence and continuity are major considerations in the organization and administration of the secondary-school curriculum. The criticism is common that the high-school graduate is too frequently found with a mind hazy and uncertain in the presence of the realities of life; his training has been broad at the expense of depth; he knows "a little of everything but not much of anything"; he has little power for substantial thinking; he has no habit of thorough analysis; he generalizes without factual foundation.

Although much can be said in defense of *extensive* education throughout the entire secondary-school period, yet the criticism must be accepted as having much weight. Among the fundamental outcomes of sound educational procedure is the ability to *think*—from cause to effect, from a factual premise to a logical conclusion. While this ability will ripen with maturity, it would appear that the mental habits and attitudes which promote its growth are acquired, if at all, during the stage of development covered by the secondary-school period. Plainly this principle calls for a curriculum based upon a definite continuity and a logical sequence in both subject field and content wherever this is possible.

It is desirable, therefore, to require that, with permissible latitude for individual election of subjects, every senior high school pupil should be held to considerable amounts of work in each of several subject fields. This feature of curriculum administration is commonly dealt with as one of "majors" and "minors." For immediate use a major is defined as three or more credit courses and a minor as two credit courses.

Taking into consideration the constants as already proposed for the senior high school period, only a reasonable degree of concentration is called for if the curriculum is so administered as to require that each high-school graduate shall have completed in the senior high school period a minimum of two majors and two minors.

2. Although sequence in certain fields is essential to both the junior and senior periods, it is also desirable to so arrange and administer the curriculum elements as to allow latitude for exploration or "tryout" in subject fields with which the pupil has previously had no direct contact. That is to say that the principle of sequence and continuity may be carried too far. In an important sense it has been a serious defect of the four-year high school that concentration began a year too soon. The junior high school will increasingly carry the burden of exploration and the senior high school that of specialization. But even the senior unit, in this reorganization, is to be so administered as to allow for some continuation of the function of exploration.

3. A third principle of signal importance is to avoid curriculum organization and administration which forces pupils into specialized training inconsistent with their needs, capacities, or interests. This principle may apply to any specialized training but is most commonly violated by establishing curriculum requirements which result in compelling all pupils to take a college-preparatory course. For the state as a whole, less than one-half the high-school graduates enter college. In view, also, of information now available concerning the type of students who may profit by education beyond the high school, it is patent that it is indefensible to create a curriculum situation whereby every pupil is forced into a college-preparatory course.

4. In the determination of a program of studies and the placement of these studies in the curriculum, it is advisable to avoid too wide a range of years in which a given course may be taken. All constants should be taken only as placed, except for repetition after failure. As regards electives, some leeway must be allowed for alternate offerings in Class A [small] schools. Even larger schools may face situations under which pupils enrolled in different high-school years must be combined in a single recitation group. There would appear to be no appreciable loss in enrolling a pupil in a recitation group one year below his classification. It is generally bad practice when the gap is extended to two years. It is uniformly indefensible if the gap becomes as great as three years. Sound curriculum administration is furthered by the adoption of a rule forbidding a pupil to offer for graduation more than one-third of the elective courses taken during his last two years which were misplaced by more than a single year.

As a whole, this publication impresses one as among the most helpful to schools within a state which has come out of state departments. It is a prophecy of the merit of the bulletins on the subject groups to follow.

SUBJECTS REQUIRED FOR GRADUATION

In this issue of the *School Review* appears the first part of George E. Van Dyke's study of trends in the high-school offering. The second part will be published in the December issue. As the author states in introducing the first part, this deals with the numbers and kinds of curriculums offered, while the second part will deal with the courses offered within the subject fields.

The published treatment will leave out of account an important phase of the organization of the program of studies, that is, the required, or constant, subjects. Although Van Dyke compiled these requirements in the programs of studies of the school year 1929-30

for the thirty-five high schools represented, he did not incorporate the findings in his article. This omission was made because Stout, whose investigation Van Dyke has in effect brought down to date, presented no tabulations on this phase of the offering with which Van Dyke might compare his more recent evidence. The issue of appropriate constants is, however, such an important phase of the whole problem of the proper organization of the offering that permission has been obtained from the author to quote and comment on

NUMBERS AND PERCENTAGES OF THIRTY-FIVE
HIGH SCHOOLS REQUIRING CERTAIN SUB-
JECTS FOR GRADUATION

Subject	Number of Schools	Percentage of Schools
English.....	35	100.0
American history.....	30	85.7
Physical education.....	21	60.0
Algebra.....	16	45.7
Geometry.....	12	34.3
Civics.....	9	25.7
Citizenship.....	5	14.3
Economics.....	5	14.3
Community civics.....	3	8.6
"Social studies".....	3	8.6
Biology.....	3	8.6
Modern history.....	2	5.7
Music.....	2	5.7
Library.....	2	5.7

these additional materials and to make such comparisons with Stout's non-tabular generalizations on the subject as are feasible.

The numbers and percentages of the high schools prescribing certain subjects for all pupils are reported in the accompanying table. This table does not list subjects prescribed in a single school only. There can be no element of surprise in the fact that English is required in all schools. The most common requirements in this field are three years (twenty-three schools) and four years (ten schools). Only two other subjects, American history and physical education or training, are required in more than half the schools. Algebra is still required in almost half the schools and geometry in a full third. Various social subjects (other than American history),

namely, civics, citizenship, economics, community civics, "social studies," and modern history, are required in a fourth or fewer of the schools. Science and the fine arts are not often recognized among the constants. Subjects found once only among requirements by Van Dyke are community and vocational civics, vocational civics, civil government, United States Constitution, social problems, general mathematics, general science, elementary science, physics, physiology, physiography, exploratory electricity, exploratory chemistry, and chorus.

Stout, generalizing for the period 1915-18, reported English as the only subject universally required. At that time algebra was required in approximately 80 per cent of the schools and geometry in approximately 60 per cent, from which it is clear by comparison with Van Dyke's evidence that supra-arithmetical mathematics is slipping as a requirement. Stout reports American history as leading the other social subjects, this study being required in 40 per cent of the schools, whereas Van Dyke shows that more than twice this proportion of schools required American history in 1929-30.

The present situation and trend in this aspect of curriculum organization afford food for feelings both of disappointment and of encouragement. The social studies still play too small a part in the education of all high-school pupils, as if there were no general appreciation among school authorities of the important obligation of the school to society. College-preparatory mathematics maintains its grip on the curriculum, even though the high school, as measured by the proportion of graduates who enter higher institutions, is dominantly non-college-preparatory. There has been no approach to agreement on those elements of science and of the fine arts, other than literature, which should enter into the training of all. The schools are still at variance concerning desirable common elements of the high-school offering. On the other hand, there seem to be something more than mere groping toward a social core of the curriculum, some recognition of the need of training for health, a distinct movement away from the requirement of college-preparatory mathematics, and at least occasional experimentation with constant courses in science and in the fine arts.

THE JUNIOR HIGH SCHOOL AND COLLEGE ENTRANCE

Early in the development of the junior high school it became apparent that, if this new institution is to render its best service in reorganization, it must have freedom to work out a well-articulated curriculum for the full three-year period which it typically includes. The practice of taking account of the work of the ninth grade in considering the acceptability of a high-school graduate for admission to college has in many places operated as a serious stricture on thoroughgoing reorganization. Despite the critical significance of the hindrance, little inquiry has so far been made into just how failure to take the work of the ninth grade into account would affect the prediction of success of the college entrant. A graduate student at the University of Wisconsin, W. E. Hess, recently completed an investigation of this influence on prediction in the case of Freshmen in that institution. We are indebted to Professor John Guy Fowlkes for the following brief summary of the investigation. The three-year senior high school period in this situation seems to be just as good a basis of prediction of success in college as does the four-year period.

In an attempt to throw more quantitative light on the desirability of considering only the grades for the tenth, eleventh, and twelfth grades as a basis for entrance to college, the records of 283 Freshmen students at the University of Wisconsin who had graduated from Wisconsin high schools having the six-three-three plan of organization were studied. This group of students represents the period 1924-29, inclusive. The marks of these 283 students made during the three years of the senior high school work—namely, Grades X, XI, and XII—were correlated with their grades made as Freshmen at the University of Wisconsin, resulting in a correlation of $.758 \pm .01706$. The marks received as Freshmen were then correlated with the marks received the ninth year of the junior high school and the last three years of the senior high school, resulting in a correlation of $.747 \pm .01772$.

In this study there seems to be further evidence favoring the utilization of senior high school marks alone as a basis of college entrance. If studies in other institutions show similar results, the desirability of certain administrative changes should be considered most carefully by all colleges and university administrators.

MEASURING THE NEED FOR GUIDANCE

A recent issue of the *School of Education Journal* published by the University of Pittsburgh is given over entirely to the report of

a group of co-operative investigations of the need of guidance in a number of high schools in western Pennsylvania. The report was prepared by Professor Percival W. Hutson from materials assembled and analyzed under his direction by administrators and teachers connected with the high schools represented. Three important situations calling for the exercise of choice were selected for investigation: the decision of high-school graduates to enter college or university, the occupational aspirations of junior and senior high school pupils, and the selection of elective courses in the high school.

In the investigation of the first situation the high-school marks of the graduates were transmuted into percentile ranks, and these were used as a basis of prediction of probable success in college. The conclusion from the study of this situation is as follows:

In so far as the data presented in this study may be considered representative of western Pennsylvania high schools, guidance with reference to the college decision is somewhat needed. The welfare of society and of the individual demands that more of the superior students be given the development afforded by college and university education. Complementarily, those of lower capacity should be saved the experience of failure with its attendant social and individual expense, its unfortunate personality effects, and its necessary readjustments. . . .

While the facts indicate a considerable need for guidance, it is quite evident that the function is being partially performed at present. Comparison with studies made in three mid-western states affords some degree of satisfaction with conditions in western Pennsylvania, the need for guidance being more pronounced in the mid-west.

In the study of the second situation the occupational choices of pupils were compared with the distribution of occupations in the population and with the intelligence typical of those engaged in these occupations. This study yielded significant conclusions.

1. The choices of both boys and girls in the upper and the lower secondary schools are seriously out of line with social need as indicated by the present distribution of workers among the occupations.
2. The distribution of the occupational choices of pupils in junior high schools is very similar to that of pupils in senior high schools, although the percentage of the former choosing professions is slightly larger.
3. The bulk of the boys' choices are in professions and skilled trades; the girls', in semi-professions and business-clerical vocations.
4. A comparison of general intelligence with occupational level selected yielded slight evidence of rational choice; those choosing professions ranked

highest in intelligence and those choosing semi-professions, second highest. But the distributions of intelligence of the pupils in those two occupational categories were very wide as were also the distributions of the business-clerical and the skilled trades' groups. And the over-lapping of all four groups was found more significant than their difference.

5. Evidence was introduced showing that senior high school pupils do not choose occupations more wisely than junior high school pupils.

6. By their "reasons" for occupational choice high-school boys and girls exhibit a lack of sound thinking in the all-important vocational decision. There is little consideration of matching their capacities with occupational requirements; most of their reasons are various expressions of self-advantages or an unanalyzed "like" or "interest."

Study of the third situation disclosed some superiority in the intelligence of pupils who elected subjects like Latin and algebra over pupils who did not elect such subjects, but the investigator's opinion is that there was too little leeway of choice in most of the schools to permit guidance to influence selections.

In concluding the presentation of these few rough measures of the appropriateness of pupils' curricular choices, it is altogether necessary to point out the utter dependence of wise choice upon the existence of a diversified curricular offering. Unless the opportunities afforded by the program of studies correspond to the variations in pupil capacity and interest, it is obviously impossible for all pupils to make rational choices. In vast numbers of our high schools, the narrow offering of subjects operates as a stricture rendering impossible the exercise of curricular guidance. Generally speaking, the smaller the school, the more severe is this stricture. But even large high schools have great need of curricular expansion and modification in order to give guidance an adequate opportunity to function. . . .

To pass full judgment on the wisdom of pupils' curricular choices, we should have before us adequate descriptions of the opportunities from which they make their choices. It may be true in many instances that guidance is as effective as it can be and that it simply awaits the accomplishment of adequate curriculum construction.

Inquiries of these appraising types may well be multiplied. We can agree with Hutson when he says, "Guidance needs this testing and proving. It has been too long in the promotional stage."

SIGNALIZING ENTRANCE INTO NEW SCHOOLS

To begin work in a new school structure is always an auspicious event. This is true whether the occasion is the entrance into new

quarters of a school already in existence, as was the case early in September with the Trenton Senior High School in Trenton, New Jersey, or that of the birth of a new school, as was the case at about the same time with the Abraham Lincoln High School in New York City. In both institutions the entry was celebrated by the principals, in the first school by the preparation and distribution of a teachers' handbook of method and in the second by an opening address of the principal to the faculty. Probably other ways of signalizing the event involved pupils, parents, or the community, but these have not come to the attention of the *School Review*.

The teachers' handbook prepared by William A. Wetzel, principal of the Trenton Senior High School, opens with a chapter on the philosophy of secondary education cast in democratic terms and so formulated as to be applicable in the teachers' work. This discussion is followed by chapters dealing with unit organization and with the principles of general method. A chapter entitled "Every Teacher a Teacher of English" shows all instructors how they can contribute toward building good English usage. A brief chapter entitled "Method in Arithmetic" describes the responsibilities of home-room teachers in giving instruction in a course in minimum essentials of arithmetic which is required of all pupils. The final chapter deals with "Character Education" and describes a trait rating scale on which the pupil rates himself once each semester and on which each of the pupil's teachers rates him in his presence. The principal in this instance has utilized the occasion for the production and circulation among his teachers of a useful supervisory instrument.

The opening address to his faculty by Gabriel R. Mason, principal of the Abraham Lincoln High School, is brief enough to be reproduced here practically in full as it appeared in a recent issue of *High Points in the Work of the High Schools of New York City*. It deserves reading by teachers in all high schools, old as well as new.

I am indeed delighted to welcome you all as the charter members of our faculty. Upon us as pioneers devolves the duty of building the spiritual superstructure of the Abraham Lincoln High School. I hope that in this we shall all work as faithfully and as loyally as the committee of thirty teachers which functioned during the summer. . . . Due to their zeal and energy, everything is in complete readiness for an auspicious start on Monday morning.

During the summer, I have frequently asked myself, "What sort of school shall the Abraham Lincoln High School be?" Briefly, I have answered it as follows:

I would like our school to be a happy school, where all the pupils as well as the teachers will be thoroughly happy; where a spirit of joy and an atmosphere of good cheer and friendship will prevail.

I would like our school to be a democratic school, where teachers, chairmen, and supervisors will join hands in co-operatively administering the affairs of the school in the interests of the students.

I would like our school to be a beautiful school, where not only will we bend all our efforts to preserve the elegance and the magnificence furnished us by our generous city in this \$3,500,000 building, but where also we will increase the aesthetic impression it makes by adding decorations of artistic value in halls, classrooms, library, and auditorium.

I would like our school to be an interesting school, where not only lessons will be taught and examinations given, but where dozens of extra-curriculum clubs will carry on their specialties in that contagiously invigorating atmosphere that prevails when interested students voluntarily gather around an enthusiastic leader of personality.

I would like our school to be a progressive school, where methods of teaching as well as those of discipline will be in accordance with the best contributions made by modern psychology and the most accepted principles of educational practice; where experimentation with the project method, Dalton Plan, social recitation, and objective testing will be encouraged; and where a sensible use will be made of vocational guidance, health clinics, home visiting, and mental hygiene.

I would like our school to be an efficient school, where, by dint of careful planning, energetic work, sincere enthusiasm, and genuine co-operation, we shall accomplish all that is expected of us; and even more for the inner satisfaction that comes from doing one's work with the skill of a master and the pride of an artist.

And lastly, I would like our school to be an institution worthy of the glorious name it bears, where we will build a monument that will duly honor our great martyred president, where we will fashion a spirit that will fitly symbolize the immortal soul of our beloved Abraham Lincoln!

TRENDS IN THE DEVELOPMENT OF THE HIGH-SCHOOL OFFERING. I

GEORGE E. VAN DYKE

Graduate Student, University of Chicago

One of the most important phases of secondary education is the subject offering—the courses and curriculums that comprise the education of the vast numbers of young people now attending secondary schools. Studies tracing the changes that have taken place in the high-school offering have appeared from time to time, the method of investigation invariably being the comparison of the offerings of different groups of schools at different periods. No matter how representative the groups of schools may be, one source of variation always is present in such studies, namely, the differences in the schools furnishing the material to be analyzed. A comparison of the subject offerings of the *same* schools at different periods would show definite trends in the development of the high-school offering and not merely variations caused by differences in the schools. The present account is a description of such a study. The subject offerings that were analyzed and compared for the different periods were all secured from a single group of high schools.

The investigation will be reported in two parts. The first part deals with the number and kinds of curriculums offered by the schools, and the second part will deal with the courses offered within the various subject fields.

Some terms relating to the curriculum on which school men and writers seem to disagree should be defined. For example, Stout, in a study which will be referred to in some detail, uses the term "curriculum" to mean the entire offering of subjects and courses in a single school, while in the descriptive material received from the thirty-five high schools represented in the present study, twelve different terms were used to express this same idea. In the present report "program of studies" will refer to the complete subject

offering of each high school, and the term "curriculum" will be used in the sense in which it is used by Koos: "The term 'curriculum' is used . . . to mean the arrangement of courses or subjects taken by a pupil or a group of pupils during progress through a secondary school. Ordinarily a curriculum is thought of as a schematic arrangement of courses designed to meet the needs of some particular group of pupils."¹ Thus, we find the college-preparatory curriculum, the commercial curriculum, the industrial-arts curriculum, and others as divisions in the complete program of studies.

PROCEDURE USED IN THE INVESTIGATION

Several years ago Stout made an excellent study of the offerings of high schools in the middle western states from 1860 to 1918.² For convenience of comparison, he grouped the programs of study of these schools into several periods according to their date of publication. In the last two periods, 1906-11 and 1915-18, programs of study from forty high schools were analyzed, thirty-five of which came from the same high schools in both periods. The writer has extended Stout's study by analyzing the offerings of the *same* thirty-five high schools for 1929-30.³

In order that the results of the analysis of the programs of study for 1929-30 might be comparable with those of the earlier periods, the methods and techniques of the present investigation were the same as those used by Stout.⁴

The thirty-five schools included in the study are located in the following cities.

Aberdeen, South Dakota	Appleton, Wisconsin
Akron, Ohio	Calumet, Michigan
Ann Arbor, Michigan	Cheboygan, Michigan

¹ Leonard V. Koos, *The American Secondary School*, p. 516. Boston: Ginn & Co., 1927.

² John Elbert Stout, *The Development of High-School Curricula in the North Central States from 1860 to 1918*. Supplementary Educational Monographs, No. 15. Chicago: Department of Education, University of Chicago, 1921.

³ Copies of the programs of study for 1929-30 were secured through the co-operation of E. S. Lide, member of the staff of investigators on the National Survey of Secondary Education.

⁴ The reader is referred to Stout's monograph for detailed descriptions of the procedures and techniques of analysis.

Columbia, Missouri	Mitchell, South Dakota
Danville, Illinois	Monroe, Wisconsin
Detroit, Michigan	Muscatine, Iowa
Elgin, Illinois	Omaha, Nebraska
Elkhart, Indiana	Oshkosh, Wisconsin
Evanston, Illinois	Ottumwa, Iowa
Fort Wayne, Indiana	Pontiac, Illinois
Hutchinson, Kansas	St. Louis, Missouri
Ionia, Michigan	Saginaw, Michigan
Kankakee, Illinois	Sheboygan, Wisconsin
Lansing, Michigan	Sioux Falls, South Dakota
La Salle, Illinois	Winnetka, Illinois
Leavenworth, Kansas	(New Trier Township High School) ¹
Marinette, Wisconsin	Yankton, South Dakota
Miamisburg, Ohio	Ypsilanti, Michigan

The schools were predominantly four-year high schools in all three periods. However, one school was operated as a six-year school in 1915-18, and ten schools were operated as three-year senior high schools in 1929-30. In the case of the senior high schools the ninth-grade offerings of the junior high schools in the same cities were included in the analysis in order that the final results would be comparable with the findings of Stout.

RESULTS OF THE ANALYSIS

The variations in the number of curriculums offered by the schools in the different periods, the names of the different curriculums, and the number of schools offering each were some of the important comparisons given in Stout's study. However, for the periods 1906-11 and 1915-18 he included sixty schools in these comparisons. It is unfortunate that the offerings of the thirty-five schools which were identical to the two periods could not be separated from the offerings of the other twenty-five schools. Because Stout's data were not presented in such a manner that this separation could be made, the writer is able to compare only the offerings of the thirty-five schools for the year 1929-30 with the offerings of the sixty schools for the earlier periods. It should be kept in mind that the thirty-five schools of the present study are included among the sixty

¹ This high school was referred to in Stout's monograph as the Kenilworth High School, Kenilworth, Illinois.

schools of Stout's study. Table I shows the variations from period to period in the number of different curriculums offered.

It will be seen that in the first two periods the type of program of study most frequently found was one in which no separate and distinct curriculums were set up, the type which Koos calls the "*constants-with-variables type*."¹ Programs of study composed of four

TABLE I
DISTRIBUTION OF SCHOOLS STUDIED ACCORDING
TO NUMBER OF CURRICULUMS OFFERED
IN THREE PERIODS

NUMBER OF CURRICULUMS OFFERED	NUMBER OF SCHOOLS		
	1906-11	1915-18	1929-30
1.....	23	15	7
2.....	7	5	1
3.....	4	5	3
4.....	14	8	5
5.....	9	7	7
6.....	3	4	3
7.....	0	6	3
8.....	0	3	1
9.....	0	2	1
10.....	0	1	2
11.....	0	1	1
12.....	0	1	0
13.....	0	1	0
19.....	0	1	1
Total.....	60	60	35

curriculums were found next in frequency in the first two periods, while in the last period programs of study including five different curriculums were mentioned as frequently as was the constants-with-variables type. Great variation is shown among the schools in the number of curriculums included in the programs of study. The trend is certainly not toward standardization in this phase of curriculum organization. The sixty schools in the first period offered a median of 2.5 curriculums and in the second period a median of 4.6 curriculums, while thirty-five of these schools offered in the third period a median of 5.2 curriculums.

¹ Leonard V. Koos, *op. cit.*, pp. 519-20.

The trend toward greater variation and less standardization is particularly apparent from an examination of the number of *different* curriculums offered. By actual count it was found that the sixty high schools offered in the first period forty-six *different* curriculums. Practically five out of six of the schools at that time were offering unique curriculums not offered by other schools. In the second period seventy-seven *different* curriculums were offered by the same schools. At that time every one of the sixty schools was offering at least one curriculum that was not being offered by any other school, while a few were offering two such curriculums. In the third period fifty-seven *different* curriculums were offered by thirty-five schools. Each of the thirty-five schools in the third period was offering one unique curriculum, and two out of three schools were offering two curriculums that were not being offered by any of the other thirty-four schools. The conclusion expressed by Stout in summing up his comparisons on this point reads, "No uniformity exists in the plan of organization of curricula."¹ In the opinion of the writer, the same concise statement applies to the situation existing in 1929-30. Even less uniformity existed among high schools in the last period than existed fifteen and twenty years ago in the matter of names and number of curriculums offered.

A more important development in the organization of the high-school offering is seen when the curriculums are grouped into three main divisions according to their functions or purposes, namely, college-preparatory curriculums, general curriculums, and curriculums specializing in fine and practical arts. The developments in the fine- and practical-arts division were so outstanding that these curriculums are subdivided into commercial, industrial-arts, household-arts, fine-arts, and miscellaneous curriculums—the last named including agriculture, normal training, etc.

Table II shows the number of curriculums in the various divisions that were offered by the high schools at the three different periods. A trend toward expansion throughout the high-school offering is seen in this table. The average number of curriculums within practically all the divisions has increased from period to period, the only exception being the college-preparatory division, in which the aver-

¹ John Elbert Stout, *op. cit.*, p. 202.

age number of curriculums offered in the second and the third periods are the same. The increase is especially marked in the commercial group of the fine- and practical-arts division. The fact that the average number of curriculums in the college-preparatory division has not increased does not mean that the college-preparatory function of the high school is becoming less important; it means that

TABLE II
NUMBER OF CURRICULUMS OFFERED IN VARIOUS CURRICULUM DIVISIONS

CURRICULUM DIVISION	NUMBER OF DIFFERENT CURRICULUMS OFFERED*			TOTAL NUMBER OF CURRICULUMS OFFERED BY ALL SCHOOLS*			AVERAGE NUMBER OF CURRICULUMS OFFERED		
	1906-11	1915-18	1920-30	1906-11	1915-18	1920-30	1906-11	1915-18	1920-30
College-preparatory.....	29	31	26	80	100	60	1.3	1.7	1.7
General.....	4	3	2	13	18	26	0.2	0.3	0.7
Fine- and practical-arts:									
Commercial.....	3	8	9	32	44	41	0.5	0.7	1.2
Industrial-arts.....	6	17	10	10	33	24	0.2	0.6	0.7
Household-arts.....	1	11	3	1	19	14	0.02	0.3	0.4
Fine-arts.....	1	2	5	1	3	7	0.02	0.05	0.2
Miscellaneous.....	2	5	2	5	22	7	0.08	0.4	0.2
Total (fine- and practical-arts).....	13	43	29	49	121	93	0.8	2.0	2.7
Total (all divisions).....	46	77	57	142	239	179	2.4	4.0	5.1

* It should be kept in mind, when the figures in these two columns are read, that Stout included sixty high schools in his report for the first two periods, while thirty-five schools were included for the last period. The figures under "Average Number of Curriculums Offered" are directly comparable.

other functions of secondary education are assuming greater importance, particularly the function of providing training in the fine and practical arts.

The shifting of the emphasis placed on the curriculums can best be seen through a comparison of the relative positions held by the various divisions in the total offerings of the high schools. Table III presents these data, and Figure 1 shows the trends in graphic form. It is apparent that the curriculums the chief function of which is preparation for college have grown proportionately less important in the total offerings of the high schools, comprising only one-third of the offerings in the last period compared with over one-half in the

first period. The general and the fine- and practical-arts curriculums, on the other hand, have increased in importance. The latter division comprised only one-third of all the curriculums in the first period,

TABLE III
NUMBERS AND PERCENTAGES OF CURRICULUMS IN THE VARIOUS DIVISIONS

CURRICULUM DIVISION	1906-11		1915-18		1929-30	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
College-preparatory.....	80	56.3	100	41.8	60	33.5
General.....	13	9.2	18	7.5	26	14.5
Fine- and practical-arts:						
Commercial.....	32	22.5	44	18.4	41	22.9
Industrial-arts.....	10	7.0	33	13.8	24	13.4
Household-arts.....	1	0.7	19	8.0	14	7.8
Fine-arts.....	1	0.7	3	1.3	7	3.9
Miscellaneous.....	5	3.5	22	9.2	7	3.9
Total (fine- and practical-arts)	49	34.5	121	50.6	93	52.0
Total (all divisions).....	142	100.0	239	100.0	179	100.0

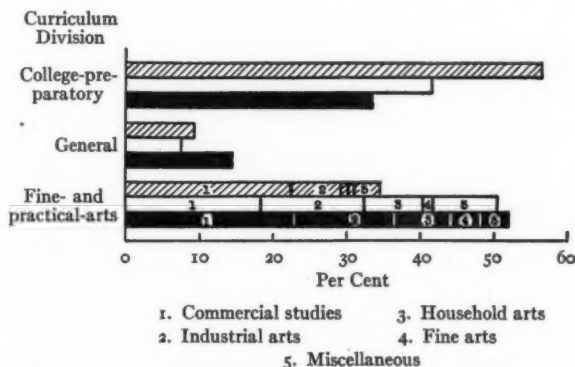


FIG. 1.—Percentages of all curriculums in various divisions in 1906-11 (shaded bars), 1915-18 (white bars), and 1929-30 (black bars).

while in the last period it comprised over one-half. Within this division the commercial curriculums lost importance in the second period but regained it in the third, while the industrial- and household-arts offerings show a strong increase in the second period.

It should not be assumed from these data that the college-preparatory function of secondary education as a whole is becoming less important. The various curriculums have been organized around definite objectives, certain courses and subjects being required of all pupils pursuing the curriculums. However, all the courses in the curriculums are required in very few schools. Pupils are permitted to select other courses, either from specified lists of electives or from the entire course of study. In this manner practically all the curriculums in both the general division and the fine- and practical-arts division may serve the college-preparatory function through the selection of the subjects and courses that are required for admission to colleges. Preparation for college is undoubtedly as important a function of secondary education at the present time as it has ever been. The important point in connection with this discussion is that other functions of the high school, especially the function of providing training in the practical arts, have taken on more and more importance as functions of secondary education.

SUMMARY

It is evident that the present trend in the organization of courses of study in high schools is not toward standardization. The offerings of thirty-five schools were much more varied in 1929-30 than were those of sixty schools in 1906-11 and 1915-18. This trend might appear to be undesirable. It might seem that secondary education, instead of becoming more orderly and well defined, is approaching a state of chaos. However, when the direction in which the changes are progressing is understood, it is seen that a desirable end is being reached. School men of today are enriching and expanding the offerings of their schools in an effort to provide, through curricular organization, wider and richer contacts than ever before for the education of the young people who come to them with greater and greater variations in abilities, interests, and needs.

[To be concluded]

A COMPARATIVE STUDY OF PUPILS IN ACADEMIC COMMERCIAL, AND VOCATIONAL CURRICULUMS

T. L. ENGLE

Isaac C. Elston Senior High School, Michigan City, Indiana

Upon entering the Isaac C. Elston Senior High School, Michigan City, Indiana, a pupil selects one of three curriculums: academic, commercial, or vocational. Many of the teachers have held the opinion that the pupils who elect the vocational and commercial curriculums are slower mentally than those who elect the academic course. A few teachers have resented the implication that these pupils are inferior to the pupils in the academic course. Some of the teachers who have considered the commercial and vocational pupils inferior to the academic pupils have believed that it is necessary to lower the standards of work in the commercial and vocational courses. Furthermore, at least part of the pupils have seemed to believe that the commercial and vocational courses are the easy courses. Occasionally complaints have been heard from business men that the young people who come to work for them are lacking in general mental ability. The policy of the faculty in the junior high school has been to advise those pupils of known low mental ability to take either the commercial curriculum or the vocational curriculum, and there has seemed to be a tendency on the part of poor students to prefer these courses. To determine whether there is any basis for holding the opinions cited, the writer decided to make a scientific study of the problem.

The plan followed in making this study consisted of two parts: (1) the giving of an intelligence test to pupils in the academic, commercial, and vocational curriculums and the tabulating of the results; (2) the collecting and tabulating of school marks under four subject headings, namely, core subjects, academic subjects, commercial subjects, and vocational subjects. The study was made in the first semester of the school year 1930-31.

As it was not deemed practical to study the entire high school, a group was selected consisting of all pupils in the tenth grade and those in the second semester of the ninth grade, that is, those having from four to fourteen credits, inclusive. In the Michigan City school organization the first semester of high-school work is taken in the junior high school, and the credits earned there count toward high-school graduation. As the first-semester pupils were under a different administration, to include them in the group to be studied was not practical. The group chosen for study was selected for two reasons: (1) The pupils in the grades studied seem to encounter the most difficulty, whereas elimination tends to smooth out differences in the upper grades. (2) Less confusion is likely to be found in the records of pupils in the lower grades. Although a pupil is supposed to continue in a curriculum after he has selected it, changes are permitted for good reasons. Changing usually occurs about the beginning of the Junior year, and in some cases this fact makes a definite statement of classification difficult. The entire enrolment in the grades selected was studied except a few pupils who happened to be absent on the days on which the intelligence tests were given. Three hundred and thirty-nine pupils, who had earned 2,920 semester marks, were studied.

Pupils taking the academic course are those desiring a general high-school course and those wishing to prepare for college entrance. A pupil taking the academic course automatically meets college-entrance requirements. The commercial and vocational curriculums do not ordinarily meet college-entrance requirements, although they permit high-school graduation and special arrangements may be made to meet college-entrance requirements. Commercial and vocational curriculums are open to both boys and girls. However, the vocational work for girls is not so highly organized as is the vocational work for boys. For this reason most girls not expecting to go to college choose the commercial curriculum, while boys not expecting to go to college usually take the vocational curriculum. Of the 117 commercial pupils in this study, 94 (80.3 per cent) are girls; of the 74 vocational pupils, 67 (90.5 per cent) are boys. Of the 148 academic pupils, 54 (36.5 per cent) are girls, and 94 (63.5 per cent) are boys. Of the entire group of 339 pupils, 155 (45.7 per cent) are girls, and 184 (54.3 per cent) are boys.

The Otis Self-administering Tests of Mental Ability, Higher Examination, Form C, were given to all pupils in the group. Thirty minutes was allowed for the test. None of the pupils had taken this test before, and none had taken any intelligence test for at least a semester. The data were grouped into border-zone, dull, normal, superior, and very superior classifications in accordance with the Interpretation Chart for Higher Examination (which is furnished with the tests) except in the case of normal. Here a further division was made. On the interpretation chart intelligence quotients of 90-109 are considered normal, but in this study the normal classifica-

TABLE I
DISTRIBUTION OF 339 PUPILS IN THREE CURRICULUMS
ACCORDING TO INTELLIGENCE QUOTIENTS

INTELLIGENCE QUOTIENT	ACADEMIC CURRICULUM		COMMERCIAL CURRICULUM		VOCATIONAL CURRICULUM		ALL CURRICULUMS	
	Number of Pupils	Percentage of Pupils	Number of Pupils	Percentage of Pupils	Number of Pupils	Percentage of Pupils	Number of Pupils	Percentage of Pupils
70-79 (border zone).....	0	0.0	6	5.1	5	6.8	11	3.2
80-89 (dull).....	18	12.2	26	22.2	19	25.7	63	18.6
90-99 (lower normal)....	37	25.0	38	32.5	35	47.3	110	32.4
100-109 (upper normal)...	58	39.2	38	32.5	11	14.9	107	31.6
110-119 (superior).....	27	18.2	8	6.8	4	5.4	39	11.5
120-29 (very superior)...	8	5.4	1	0.9	0	0.0	9	2.7
Total.....	148	43.7	117	34.5	74	21.8	339	100.0

tion was divided into lower normal, 90-99, and upper normal, 100-109. This division made all the intervals even. No cases of feeble-mindedness were found.

The data secured from the intelligence tests are found in Table I and are graphically presented in Figure 1. It is to be noted that for the academic pupils the distribution is distinctly skewed toward the higher levels of intelligence, that in the case of commercial pupils it is somewhat skewed toward the lower levels of intelligence, and that in the case of vocational pupils it is distinctly skewed toward the lower levels. When this material was shown the teachers, some expressed surprise that there was not a greater difference between the medians for the groups. Possibly, a study of the quartiles, given in Table II, will account for this fact. It may be that teachers are

influenced too much by the lower quartiles of their classes in judging them to be poor classes or by the upper quartiles in judging them to be good. For example, practically all the academic pupils in the upper fourth are ranked as intellectually superior or very superior, while the upper fourth of the pupils in the commercial course include a good many who have upper-normal mental ability. In the case of vocational pupils the upper fourth includes all upper-normal and

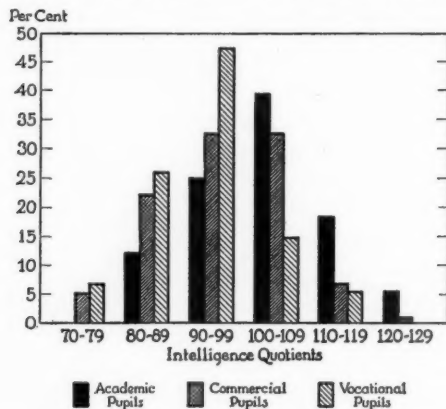


FIG. 1.—Percentage distribution of intelligence quotients of 148 pupils in the academic curriculum, 117 pupils in the commercial curriculum, and 74 pupils in the vocational curriculum.

superior pupils, there being no very superior pupils. The lower quartiles show similar differences.

When the scholastic records were studied, the subjects of instruction were divided into four groups. The core subjects include those required of all pupils.¹ The academic subjects are those required of all pupils in the academic curriculum; the commercial subjects, those required of all pupils following the commercial curriculum; and the vocational subjects, those required of pupils in the vocational curriculum. Of course, pupils in any curriculum are allowed some elections in other curriculums. The classification of subjects is as follows:

¹ A few elective subjects of a general nature that are open to all pupils are included in this group, although the bulk of the marks are in required subjects.

Core subjects.—English, ancient history, European history, biology, fundamental art, commercial art, band, orchestra.

Academic subjects.—Algebra, geometry, Latin, French.

Commercial subjects.—Commercial arithmetic, economic geography, book-keeping, shorthand, typing.

Vocational subjects.—Shop mathematics, mechanical drawing, architectural drawing, vocations, shop tryout, woodshop, machine shop, automobile shop, cooking, sewing, dietetics, home management, nursing.

In addition to the subjects listed as core subjects, a few others were listed in the case of pupils who had transferred from schools offering subjects not offered in this high school. For instance, general science is not given in senior high schools in Indiana; if a pupil

TABLE II
SUMMARY OF DISTRIBUTION OF INTELLIGENCE QUOTIENTS
OF 339 PUPILS IN THREE CURRICULUMS

Measure	Academic Curriculum	Commercial Curriculum	Vocational Curriculum	All Curriculums
Upper quartile	109.65	105.67	99.00	106.57
Median	103.28	96.97	93.71	98.68
Lower quartile	95.14	88.94	87.11	89.77
Quartile deviation	7.26	8.37	5.95	8.40

had taken this subject in another state for high-school credit, it was counted toward graduation and was included as a core subject in this study. Commercial art is listed as a core subject; the name of this course is misleading as it is not considered a part of the commercial work. In Indiana algebra and geometry are not required of all pupils, and for this reason they were not considered core subjects in this study. There are very few marks in typing and shorthand as these subjects are given in the eleventh grade. The marks in these subjects are those of retarded pupils who had less than fifteen credits although normally they held eleventh-grade standing. No fractional credits were counted in the tabulation.

A five-letter marking system is used in this high school. For this study the letters were weighted. The letters, ranks, and weightings are given in Table III.

The distribution of the school marks is given in Table IV. In three cases the total number of marks is too small to be considered

reliable: academic pupils in commercial subjects, vocational pupils in academic subjects, and vocational pupils in commercial subjects.

TABLE III
RANKS ASSIGNED EACH LETTER MARK IN THE MARKING
SYSTEM AND WEIGHTS ASSIGNED IN THIS STUDY

Mark	Rank	Weight
A.....	Superior	4
B.....	Good	3
C.....	Average	2
D.....	Poor	1
E.....	Failure	0

TABLE IV
TOTAL NUMBER OF MARKS, AVERAGE MARKS, AND PERCENTAGES OF FAILURE IN
FOUR SUBJECT GROUPS MADE BY PUPILS IN THREE CURRICULUMS

Subjects	Total Number of Marks	Average Marks	Percentage of Failure
Pupils in academic curriculum:			
Core.....	577	2.36	3.1
Academic.....	586	1.75	11.9
Commercial.....	22	1.95	9.1
Vocational.....	82	2.27	4.9
All subjects.....	1,267	2.15	7.4
Pupils in commercial curriculum:			
Core.....	455	1.94	8.6
Academic.....	128	2.27	12.5
Commercial.....	271	1.79	13.7
Vocational.....	154	1.98	2.6
All subjects.....	1,008	1.92	9.5
Pupils in vocational curriculum:			
Core.....	210	1.26	17.6
Academic.....	25	1.40	36.0
Commercial.....	37	1.30	29.7
Vocational.....	373	1.89	4.6
All subjects.....	645	1.63	11.5
All pupils:			
Core.....	1,242	2.00	7.6
Academic.....	739	1.97	12.9
Commercial.....	330	1.75	15.2
Vocational.....	609	1.97	4.1
All subjects.....	2,920	1.95	9.0

Again, the number of marks for academic pupils in vocational subjects is comparatively small. The fact that these totals are small is

significant in itself. Table IV and Figure 2 indicate that the classification by school marks follows the same trend as classification by

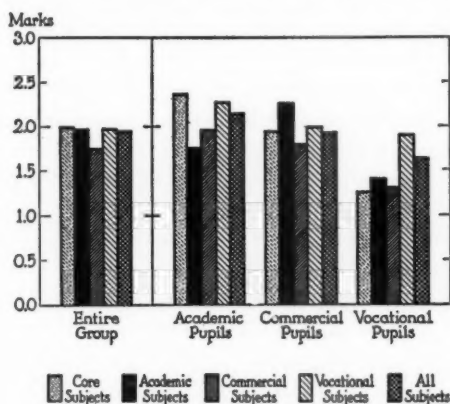


FIG. 2.—Average marks in four groups of subjects and in all subjects earned by entire group of pupils and by pupils in academic, commercial, and vocational curriculums.

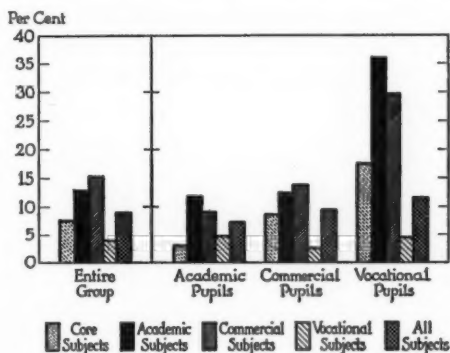


FIG. 3.—Percentages of failure in four groups of subjects and in all subjects of entire group of pupils and of pupils in academic, commercial, and vocational curriculums.

intelligence quotients. The average mark of the academic pupils is above the average of the entire group, and the percentage of failure is lower than the percentage of the entire group. Commercial pupils

are slightly inferior in average marks and percentage of failure. Vocational pupils are distinctly inferior in both respects.

The fact that the average mark of commercial pupils taking academic subjects is high was hardly to be expected. However, it should be noted from Table IV and Figure 3 that the percentage of failure is also high (although it is lower than the percentage of failure in the commercial subjects) and that the total number of marks is not large enough to give a reliable measure. Of the 128 marks in this group, 13 were earned by pupils classed as intellectually superior, 57 by upper-normal pupils, 35 by lower-normal pupils, 19 by dull pupils, and 4 by border-zone pupils. The number of failures were 0, 2, 4, 9, and 1, respectively.

The writer reached this general conclusion: The intelligence quotients and the school marks indicate differences in the abilities of academic pupils, commercial pupils, and vocational pupils, the academic pupils standing highest, the commercial pupils next, and the vocational pupils lowest. A study of the average marks and the percentages of failure, mental abilities being kept in mind, indicates that there is justification for the opinion that standards of work are highest in academic courses and that they are lowest in vocational courses. Commercial courses seem to offer difficulties commensurate with the abilities of the pupils taking the courses.

A STUDY OF PART-TIME JOBS FOR BOYS

CHARLES W. PALMER

Northeast High School, Philadelphia, Pennsylvania

Part-time work for boys who are attending school is often used as a device to help the boys to remain in school when economic pressure would tend to cause them to withdraw. As is true with any other device, its use must be justifiable. Those interested in boys make the criticisms that the boys who work are deprived of time to play, that they are forced to neglect their lessons, and that they have no time to participate in extra-curriculum activities. It is also said that the work is a menace to health and that it subjects the boys to moral hazards which they should avoid. If these criticisms cannot be answered, a strong case must be presented for the part-time job, or it must be abandoned and educators must assist those who would pass legislation to eliminate it. The writer has felt that all opinions on the subject were entirely subjective and must continue so until supported by a sufficient body of objective data.

He undertook the study described in this article in order to determine the earnings of the boys in the Northeast High School, Philadelphia, who have held part-time jobs, the more desirable types of work, and the effects of the work on the boys' school performance. Questionnaires were given to the boys in Northeast High School in 1925, 1927, 1928, and 1930. The questionnaires used in the first three years were longer than the questionnaire used in 1930, and they dealt with a number of factors that do not seem pertinent to the present purpose. At the time they were given, some of the data used in the present inquiry were not available. These deal with the influence of work on school performance. The form used in June, 1930, read as follows:

PART-TIME WORK BY NORTHEAST BOYS

Answers to the following will enable us to be of greater service to the boys who need work while going to school. The information will be kept confidential.

Answer all questions if you work. Answer to No. 5 if you do not work for pay outside school hours.

1. Name _____ 2. Section _____ 3. Date _____
4. Address _____
5. Do you work for pay during the school year? (This does not include summer vacations.)
6. Employer's name?
7. Employer's business?
8. When do you work? (Before school? After school? Evenings? Saturday? Sunday?)
9. What kind of work do you do?
10. How many hours a week do you work?
11. How much do you earn?
12. How much of your earnings do you give your parents?
13. Is it necessary for you to work to remain in school?
14. How long have you held your job?
15. How did you get it?
16. Has your employer urged you to remain in school?

No effort was made to coerce boys who were unwilling to answer the questions. Fourteen and eight-tenths per cent failed to answer, and 5.5 per cent were absent on the day the questionnaire was administered. Some of those who answered omitted answers to the questions dealing with earnings and the number of hours employed each week, but the number of these was not sufficiently large to justify discarding these questions from consideration. A total of 514 boys, or 23.3 per cent of those enrolled, reported that they were working. Table I gives an analysis of the figures by classes and for the whole school in so far as they deal with earnings. The number of pupils enrolled was secured from the school office. The number of boys working and the average earnings were secured from the replies to the questionnaire. In cases where the amounts of earnings were omitted in the answers, these were estimated at the average for the group. About 10 per cent of the total were thus interpolated. The average earnings for the school year were secured by multiplying the average weekly earnings by 40. The total earnings for the school may seem large. The questionnaire was administered in June, at a time when fewer boys were working than usual. Nearly all the graduating group had given up their jobs. The autumn and early winter are the seasons when there is great demand for boys, and

many more are working then than at any other time. The number working in June is much below the average for the year; consequently, the earnings based on data secured in June are below the average for the year.

It is known that many of the boys who work would be forced out of school by economic pressure or by unsympathetic attitudes at home if they did not have part-time jobs. In answer to Question 13,

TABLE I
NUMBER OF BOYS ENROLLED IN NORTHEAST HIGH SCHOOL, NUMBER
WORKING, AND THEIR EARNINGS IN JUNE, 1930

Grade	Number Enrolled	Number Working at Part-Time Jobs	Average Weekly Earnings	Average Earnings in School Year	Total Earnings for Grade
IX A.....	375	90	\$4.16	\$166.40	\$ 14,976.00
IX B.....	260	51	4.24	169.60	8,649.60
X A.....	460	107	4.23	169.20	18,104.40
X B.....	299	73	5.10	204.00	14,892.00
XI A.....	196	62	6.31	252.40	15,648.80
XI B.....	208	65	5.83	233.20	15,158.00
XII A.....	175	41	5.34	213.60	8,757.60
XII B.....	237	25	7.04	281.60	7,040.00
All grades.....	2,210	514	\$5.02	\$200.80	\$103,211.20
Add*.....		93	5.02	200.80	18,674.40
Total.....	2,210	607	\$5.02	\$200.80	\$121,885.60

* The addition of 93 to the number of boys reported as working at the average earnings of the group is justified as follows: All the boys in Grade XII B reported, whether working or not. Of the remainder 14.8 per cent did not report, and about 5.5 per cent were absent. A large proportion of those not answering were boys who were working but did not want to give the data. It is considered fair, therefore, to add 23.3 per cent of these to the total in securing the total of workers and their earnings. The addition is considered conservative.

217 boys, or 42.2 per cent, stated that it was necessary for them to work. Even if this number be discounted, there is still a large number of boys whose schooling was dependent on their working. Three hundred and sixty boys stated that they gave varying amounts to the home budget. In other words, 70 per cent of the workers were giving all or a part of their earnings to their parents. An additional small number were buying all their own clothes. These contributions to the family income constitute an excellent substitute for the chores which were performed by the boys of former generations. The chores reduced the family expense; the contributions increase the family income. Both are good preparation for the day when the

boys, with families of their own, will bring to the responsibilities of life a willingness that can be induced in no better way.

When the influence of part-time work on school performance was considered, attendance, tardiness, scholarship honor lists, and subject failures were studied. Attendance records and records of tardiness are parts of the school's regular reports to the office of the superintendent of schools. The percentage of attendance for the spring semester was 94.5; the percentage of tardiness, 0.7. The individual records of all part-time workers showed an average percentage of attendance of 96.1 and an average percentage of tardiness of 0.6. In other words, the percentage of absence was 3.9 for the workers and 5.5 per cent for the school as a whole, a difference in percentages of 1.6 in favor of the workers. The percentage of tardiness was 0.6 for the workers and 0.7 for the school as a whole, a difference in percentages of 0.1 in favor of the workers.

The "Daily Bulletin" of Northeast High School (a mimeographed paper issued in the school) dated September 11, 1930, gives the honor list for the term ending in June. The honor list includes all boys whose averages were 85 or over, as determined by marks at the end of the term. For the term ending in June, 1930, it included 12.0 per cent of the whole school and 8.8 per cent of the workers. In this respect the records of the workers are inferior to those of the whole school.

The failure rate for the whole school was secured from a bulletin of the Division of Educational Research of the Board of Public Education.¹ This bulletin states that the subject-promotion rate for Northeast High School in 1930 was 82 per cent. In other words, the failure rate was 18 per cent. Study of the final reports for the term of the 514 boys working at part-time jobs showed a failure rate of 15 per cent, a differential of 16.6 per cent in favor of the workers.

The findings with regard to tardiness, attendance, scholastic honor lists, and subject-failure rates, are shown in Figure 1.

A failure rate of 15 per cent, while better than the record of the whole school, still seems high. The question naturally arises: Are there some types of work that interfere with school performance

¹ *Subject Promotion Rates in Senior High Schools, June, 1930.* Bulletin 166 of the Division of Educational Research. Philadelphia: Board of Public Education, 1930.

more than do other types? To answer this question, the writer divided the data relating to the working boys into the following groups according to the boys' occupations: ninety-two newsboys,

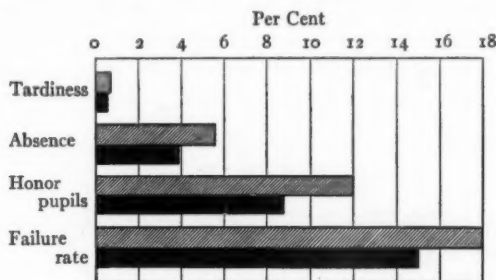


FIG. 1.—School records of boys working part time (black bars) compared with the school records of the whole school (shaded bars).

thirty-six fruit-store boys, thirty-six chain grocery-store boys, thirty-six drug-store boys, thirty-two boys in independent groceries and delicatessens, sixteen department-store boys, and fifteen ushers

TABLE II
SCHOOL PERFORMANCE OF THE WHOLE SCHOOL, OF ALL PART-TIME WORKERS,
AND OF PART-TIME WORKERS BY MAJOR GROUPS IN JUNE, 1930

Group	Number in Group	Percentage of Absence	Percentage of Tardiness	Percentage on Honor List	Percentage of Subject Failure
Whole school.....	2,210	5.5	0.7	12.0	18
All part-time workers....	514	3.9	0.6	8.8	15
Newsboys.....	92	3.9	0.6	12.0	13
Fruit-store boys.....	36	4.4	0.4	5.6	14
Chain grocery-store boys..	36	3.9	0.6	0.0	14
Drug-store boys.....	36	2.6	0.3	8.3	16
Boys in independent groceries and delicatessens	32	5.5	0.7	9.4	17
Department-store boys...	16	2.7	0.4	18.8	6
Ushers in moving-picture theaters.....	15	5.6	0.9	6.7	18

in moving-picture theaters. All other groups were so small that the percentages were considered unreliable. Absence, tardiness, honor-list, and subject-failure percentages were determined for these groups with the results shown in Table II and Figure 2.

It would seem that, from the standpoint of subject failures, work as ushers in moving-picture theaters and work as clerks in independent groceries were the least desirable. Why the latter should be less desirable than work in chain groceries is not clear. From all points of view, the most desirable work seemed to be that as newsboy and that as clerk in department stores. The hourly earnings of newsboys were more than those of any other group, averaging forty-

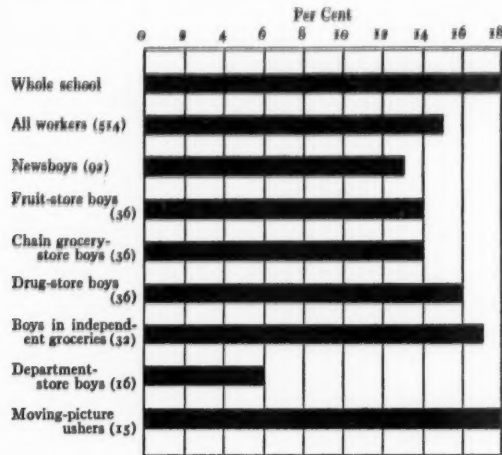


FIG. 2.—Percentages of subject failures made by boys engaged in various kinds of part-time work.

eight cents. The poorest paid were the drug-store boys, who averaged eighteen cents an hour. Other groups earned from twenty-four to twenty-eight cents an hour. Most of the boys working in department stores worked on Saturdays only, while in all other cases the majority were working during the school week. All the ushers in moving-picture theaters and many other boys worked evenings.

That the matter might be viewed from every angle, the boys were regrouped according to the weekly number of hours they were working. The lower groups were arranged to include intervals of ten hours. Above twenty hours five-hour intervals were used. Sixteen and three-tenths per cent of the workers did not state the number

of hours employed, and these were placed in a group by themselves. It was considered desirable to determine the percentage of superior marks (that is, marks of 85 and higher) as well as the subject-failure rate. Unfortunately, it was not possible to secure the percentage of superior marks for the whole school without reassembling the individual records of the 2,219 boys enrolled in June if, indeed, it could be done at all. The results of this regrouping are shown in Table III and in Figures 3 and 4. The number of hours employed weekly had

TABLE III
RELATION BETWEEN WEEKLY NUMBER OF HOURS OF WORK AND SCHOOL PERFORMANCE OF BOYS WORKING PART TIME IN JUNE, 1930

NUMBER OF HOURS OF WORK	BOYS WORKING		ABSENCE		TARDINESS		SUBJECT FAILURES		SUPERIOR MARKS	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
0-10	129	25.1	495	3.5	94	0.8	145	15	357	38
11-20	141	27.4	465	3.7	64	0.5	149	15	333	34
21-25	61	11.9	237	4.4	23	0.4	66	15	150	35
26-30	44	8.6	117	3.0	19	0.5	63	20	111	35
31-35	25	4.9	74	3.4	19	0.9	19	12	59	38
36-40	18	3.5	60	3.8	8	0.3	22	18	35	28
41 or more	12	2.3	47	4.4	19	0.7	19	24	23	29
Time omitted	84	16.3	368	4.9	41	0.6	59	11	237	42
All workers	514	100.0	1,773	3.9	287	0.6	542	15	1,305	36

no appreciable bearing on the amount of absence or tardiness. Boys who worked twenty-one to twenty-five hours a week and those who worked in excess of forty hours had absence percentages in excess of the average of the working group, but in both cases the percentages were well below the percentage of absence of the whole school. Boys who worked in excess of thirty-five hours showed a marked increase in the subject-failure rate and a pronounced decrease in the percentage of superior work. This fact would indicate that boys who work in excess of thirty-five hours a week do so to the detriment of their school work.

The answers to Question 8 ("When do you work? Before school? After school? Evenings? Saturday? Sunday?") assist in answering the problem of participation in extra-curriculum activities. One

hundred and eleven boys, or 21.6 per cent, worked week-ends only, so that their participation in extra-curriculum activities need not be affected. The ninety-two newsboys worked either in the mornings or for an average of two hours in the afternoon. The afternoon work would interfere with organized athletics, but it need not prevent

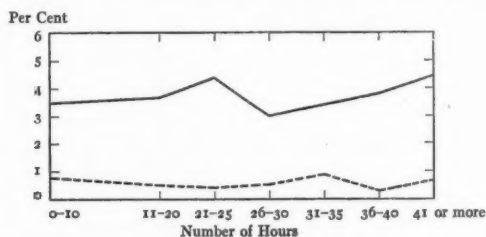


FIG. 3.—Percentages of absence (unbroken line) and tardiness (broken line) of boys working part time according to the number of hours of employment.

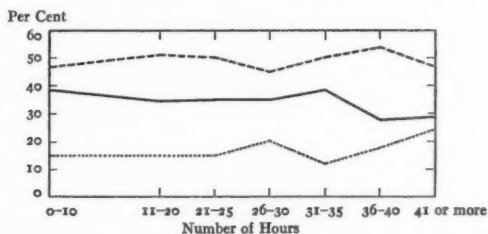


FIG. 4.—Percentages of subject failures (dotted line), of superior marks (unbroken line), and of average marks (broken line) earned by boys working part time according to the number of hours of employment.

work with the voluntary clubs, with the school paper, with the school magazine, and with the traffic squad of the school. In some cases the school clubs meet at hours that would not conflict with the working hours of employed boys. There is no way to determine from the present study just how many of the employed boys were active in the extra-curriculum activities. In 1925 Luther F. Waide-lich, of the faculty of Northeast High School, made a study bearing on this point, and he writes in an unpublished paper:

In the Northeast High School, Philadelphia, a survey was made of the participation of students in extra-curriculum activities during the year 1924-25. Of

1,756 cases studied only 23 per cent took part in any extra-curriculum activities other than athletics, in which 32 per cent participated. Judging this to be a decidedly low percentage and making an attempt to ascertain the causes, we discover that the reason generally assigned, namely, employment after school hours, had no appreciable effect. Of the students employed after school hours 24 per cent participated, while only 23 per cent who were unemployed took any interest in non-athletic extra-curriculum activities. In athletic activities 30 per cent of the students who worked participated as compared with 32 per cent who did not work.¹

The question of the influence of part-time work on health can be answered only indirectly. Absence from school is one factor on which to base an opinion. It has already been pointed out that the proportionate absence of part-time workers was much less than that of the school as a whole (actually 71 per cent as great). Even when truancy in the school was taken into consideration, there was still a difference in favor of the workers. Since absence is usually caused by illness, it may be concluded that the workers were in better health than the average schoolboy. Of course, one would not defend the employment of schoolboys as ushers in moving-picture theaters when for six nights a week they cannot reach home until midnight. However, many boys who do not work are usually out late.

On the question of the moral hazard it is also impossible to give objective data. Unquestionably, a few boys are employed in work in which this hazard is considerable. The writer believes that most boys are better off when employed. Many districts are poor in play resources and full of temptations for boys. In many homes there are few opportunities to give the boys either work or entertainment. Commercialized recreation is often associated with immoral influences. As an escape from idleness and such immoral influences, many boys welcome part-time jobs. On the positive side may be placed the business experience and the development of a feeling of responsibility toward the home. Sixty per cent of the employers were said to be urging the boys to remain in school. This fact implies a positive and constructive attitude on their part and, consequently, good working conditions. Therefore, it is believed that the moral hazard can be ignored.

¹ Luther F. Waidelich, "Extra-Curriculum Activities in a City High School." Unpublished seminar paper, University of Pennsylvania, 1925.

The present study leads to the following conclusions.

1. It has been shown that the earnings of the 23.3 per cent of the boys at Northeast High School who were working at part-time jobs in 1929-30 totaled more than \$121,000. These earnings were used by 70 per cent of the boys to help with the family budget. In 42 per cent of the cases the work enabled the boys to remain in school.

2. The school performance of the workers was superior to the average of the school in all respects investigated except in the number of pupils on the honor roll. Considered proportionately, absence was 29 per cent less; tardiness, 14 per cent less; academic failure, 16.6 per cent less.

3. From the standpoint of school records and hourly earnings, work as newsboys and work in department stores were the best. Drug-store boys received the poorest pay. They and ushers in moving-picture theaters made poor school records.

4. The weekly number of hours of employment had no appreciable effect on attendance or tardiness. School work was not affected until the boy worked more than thirty-five hours a week. Among the boys who worked more than thirty-five hours a week, there was a decided increase in inferior school work and an equally marked decrease in superior school work.

5. Part-time work in itself need not deprive many boys from taking part in the extra-curriculum activities offered in the school.

6. There was no evidence of impairment of the health of the boys because of their employment, with the possible exception of one small working group.

7. While some of the work offers moral hazards, the positive influences of the work and its surroundings and the training involved, together with the positive attitude of most employers, constitute factors that would seem to neutralize the negative influences.

8. No evidence appeared that would lead to discarding the part-time job as a device for keeping boys in school. The writer is confirmed in the belief that part-time work is a valuable addition to the educative efforts of the public school.

PERSONALITY RATINGS GIVEN HIGH-SCHOOL GRADUATES BY PRINCIPALS AND TEACHERS

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In the autumn of 1929 a "Uniform Certificate of Secondary-School Record and Application for Admission to Higher Institutions" was put into use in the state of Oregon. In addition to the usual transcript of the scholastic record of the pupil, the high-school principal was asked to give further "confidential and professional" statements including a rating similar to that of the "Personality Report" of the American Council on Education. The graphic-rating blank treats of five personality traits which may be called sociality, initiative, leadership, emotional control, and purposefulness. Five degrees of each trait are defined along a line which is to be checked at the proper place according to the judgment of the rater. For the first trait, for example, the blank is as follows:

How do his man-	|	|	|	|	|
ner and ap-	Avoided	Tolerated	Unnoticed	Well liked	Sought by
pearance af-	by others	by others	by others	by others	others
fect others?					

If a numerical score be made up by assigning five points for the highest possible rating on each trait—the degree defined farthest to the right along the line—and ranging down to one point for the lowest rating, the total score on all five traits for an individual may be any value from five to twenty-five points, inclusive. In this article the writer will simply assume and not discuss the justification for such summation of traits, as such a discussion concerns validity. Here will be determined the reliability, or self-consistency, of personality ratings under conditions favoring maximum reliability. Since the reliability coefficient is proportional to the range of values, the total score (with a range of twenty points) rather than the score on separate traits (with a range of four points) will be used.

Examination of the personality ratings sent to the University of Oregon by principals of secondary schools in the summer and autumn of 1929 disclosed great differences in marking. The average of the total scores ranged from 15.0 in some high schools to 25.0 in others, the average for 702 students from 108 schools being 18.47. On the whole, there were no significant differences in the averages of the total scores given by the following contrasted groups: principals of public high schools and principals of private secondary schools, principals of large high schools and principals of small high schools, principals of schools in the state of Oregon and principals of schools in other states. The one outstanding difference in the averages was between those given in the schools in Eugene, the "home town" of the University, and in all other schools as a group. The two Eugene high schools sent in reports for 150 students, the mean total score being 16.30 points, while for 552 other students the mean was 19.05. The complete statistical significance of this difference (which equals 6.7 times the standard error of the difference) means that the Eugene high schools are more conservative in rating the personalities of their graduates than are all the other schools from which Freshmen enter the University of Oregon. Three explanations suggest themselves: first, that the graduates of Eugene high schools may actually be of inferior personality, perhaps brought to the city and pushed through preparatory school by parents who desire a university education for their children whether or not the children can really achieve it; second, that the Eugene principals are in a better position, geographically, to recognize that certain minor personality defects may be aggravated to major proportions by the University environment; third, that the Eugene principals are more sympathetic with the problems faced by the University when it tries to understand its entering students from the meager information supplied it and that they are more willing to make the expenditure of time and real effort which cannot be avoided if ratings are to be even fairly accurate and valid.

Examination of the ratings from various schools also showed that many principals rated their students on the basis of a "halo effect" only. If one of these principals considered a student very good, he gave the highest rating in each of the five traits, but, if he con-

sidered the student mediocre, he gave the middle rating in every trait. Perfect intercorrelations among the five traits would not be expected if they really are separate aspects of a personality. Again, some principals gave all their graduates approximately the same ratings, and such uniformity is not likely to be justified in any ordinary group of persons. The lack of uniformity, or the "spread" of a principal's ratings, might then be considered an index of his discrimination, or freedom from "halo rating." The most discriminatory, both in the case of different traits of one individual and in the case of different individuals compared with each other, were the ratings from Eugene High School, of which Mr. Harry B. Johnson is the principal. The ratings from this school, then, were considered superior to most of those sent to the University because they were both conservative and discriminatory. Each of these qualities contributes to range and hence to maximum reliability.

The principal of a large school, when requested to rate his students, may feel he is handicapped through inadequate and often superficial knowledge of the pupils. In 1929 Mr. Johnson made up the personality ratings unaided, but he was not satisfied with their accuracy. In the spring of 1930 he eliminated this factor of inadequate knowledge by asking individual teachers to furnish him with ratings of the Seniors in their classes. From these ratings he made up the final ratings by taking an average, making such changes as he felt his own knowledge justified. In most cases there were four sets of ratings for each student from four different and quite independent teachers. Thus, the final rating made by the principal in 1930 had the reliability of a combination of four individuals' ratings. The material for the study reported in this article is the sets of ratings turned in to Mr. Johnson by his teachers in the spring of 1930.

Two teachers, women with several years' teaching experience, made separate ratings of twenty-two boys and twenty-six girls. Teacher A rated boys slightly lower than did Teacher B, while this very slight difference was reversed in the case of girls; for both sexes combined Teacher A's average rating was 16.15 points, and Teacher B's average was 16.46. The standard error of the means was greater than 0.5, and therefore the difference is not significant. Thus, these ratings of forty-eight students were made under highly com-

parable but independent conditions, as far as can be judged. The correlation coefficients between the ratings of these two teachers on the several students are shown in Table I as r_{AB} .

Two or more ratings were available for a total of 90 boys and 105 girls, and correlations were computed between any two ratings—by any two teachers—picked at random from those for each student during his Senior year. Thus, sex, length of experience, and many other factors may differentiate the two rating teachers in this case. (In the comparisons described in the preceding paragraph the first two of these factors were controlled.) These correlation coefficients

TABLE I
CORRELATIONS OF PERSONALITY RATINGS MADE BY TWO WOMEN TEACHERS OF LONG EXPERIENCE, OF RATINGS MADE BY TWO TEACHERS CHOSEN AT RANDOM, AND OF CHANCE PAIRS OF RATINGS CHOSEN FROM FOUR RANDOM RATINGS

	Ratings by Two Experienced Teachers— r_{AB}	Two Random Ratings— r_{11}	Chance Pairs from Four Random Ratings— r_{22}
Boys.....	.426	.541	.864
Girls.....	.522	.499	.648
Both.....	.504	.531	.746

are given as r_{11} in Table I; in every instance they are non-significantly different from the corresponding r_{AB} . Hence, Teachers A and B are reasonably typical of the school faculty, and, conversely, ratings made by any two teachers for the students they know are comparable to ratings made by two teachers especially chosen because of wide acquaintance with the whole student body.

There were available four ratings for forty-two boys and sixty-one girls, and correlations were computed between the sums of random pairs out of the four. The dissimilarities mentioned in the last paragraph are also possible in this case, although summation tends to minimize such chance discrepancies. In Table I these correlation coefficients are designated r_{22} .

On the assumption that four ratings are essentially similar to any two ratings picked from the four, the Brown-Spearman prophecy

formula¹ $\left(r_{2II} = \frac{2r_{1I}}{1 + r_{1I}} \right)$ may be used to estimate r_{2II} from r_{1I} . In

this case r_{1I} for both sexes is .531, from which r_{2II} is estimated to be .694. The difference between .694 and the value $r_{2II} = .746$, obtained by actually correlating sums of random pairs, is statistically non-significant (the difference being less than 0.8 times the standard error of the difference). Thus, the use of the prophecy formula in this connection seems to be justified. It may be applied again to determine the reliability of four ratings combined, such as formed

TABLE II
INCREASE IN ACCURACY OF PERSONALITY ESTIMATES SECURED BY
INCREASING THE RELIABILITY COEFFICIENT OF THE
PERSONALITY RATINGS

Reliability Coefficient	Value of Coefficient	Percentage of Reduction in Error of Estimate*
.....	.00	00
r_{2I}.....	.531	32
r_{2II}.....	.746	50
r_{4IV}.....	.84	60
r_{8VIII}.....	.90	68
r_{15XV}.....	.95	78
.....	1.00	100

* The formula used in obtaining this percentage is $100(1 - \sqrt{1 - r})$, where r is the reliability coefficient. This formula follows from the discussion in Truman Lee Kelley, *Statistical Method*, p. 222. New York: Macmillan Co., 1923.

the basis of Mr. Johnson's final ratings in 1930. Then, from $r_{1I} = .531$ is found $r_{4IV} = .819$, and from $r_{2II} = .746$ is found $r_{4IV} = .855$, and we may say the most probable value is $r_{4IV} = .84$. That is, the correlation coefficient .84 indicates the extent to which four teachers' ratings constitute a reliable measure of such ratings in general. Eight independent ratings might be made and, when combined, would have an estimated reliability of $r_{8VIII} = .90$ or more. Kelley states: "We may consider that individual placement . . . is excellent if the reliability is .95; that it is fair if the reliability is .90; . . . very poor . . . if the reliability is .75."² The prophecy for-

¹ Truman Lee Kelley, *Statistical Method*, p. 206. New York: Macmillan Co., 1923.

² Truman Lee Kelley, *Interpretation of Educational Measurements*, p. 177. Yonkers-on-Hudson, New York: World Book Co., 1927.

mula indicates that the "excellent" reliability of .95 would be obtained by combining about fifteen independent personality ratings.

Evidently the composite final rating is a reliable measure of the opinions of high-school teachers concerning a student's personality, and increasingly so as several ratings are combined. Theoretical "true scores" can be estimated from obtained scores with an error depending largely on the reliability of the measures; the effect of increasing reliability in reducing this error of estimate is shown in Table II. It is obvious that even an "excellent" reliability coefficient of .95 leaves more than 20 per cent of unreliability as to a student's personality when thus rated by teachers. A single rating, then, permits an estimate nearly one-third better than is possible on a sheer guess but leaves untouched more than two-thirds of the chances for error. The single ratings here considered, it must be remembered, were made by teachers especially motivated by direct responsibility to their principal and with intimate knowledge of the students rated. Personality ratings furnished the University by indifferent principals must be so unreliable as to be not only useless but dangerously untrue. In the medical profession careless diagnosis is a crime; certainly the educator, working in the delicate field of personality and aptitude adjustment, should be no less attentive to his pronouncements. With the best combination of all measurements available, the University must still have large areas of uncertainty in estimating any student's potential achievement.

Specifically, it is suggested that high-school principals require teachers to rate the personalities of their students at intervals during at least the last two years of the preparatory course. In this way, different personal reactions will largely cancel out as more teachers are involved, fluctuations in the student will be minimized as a considerable period of time is covered, and the larger number of ratings will give to the final composite a reliability of real significance. Rather incidental but still important is the fact that averaging other people's opinions is generally lighter labor than evolving one's own, and the principal might find it so in this matter. Finally, high-school principals must realize that their ratings will be taken at face value by many people and that a highly significant part of their educational responsibility is involved.

ESSAY EXAMINATIONS AND OBJECTIVE TESTS IN UNITED STATES HISTORY IN THE JUNIOR HIGH SCHOOL

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An examination of the literature relating to testing in the social sciences indicates the widespread popularity of objective tests. This popularity is particularly shown in the literature relating to testing in United States history. In recent years, however, some educators have attacked the objective, or new-type, tests on the ground that they do not measure understanding. These critics have insisted that objective tests are informational in character and that such tests measure only memory and recall. If this criticism is true, objective tests cannot be justified in United States history for, obviously, the main objectives of instruction in this subject are understanding and comprehension rather than memory and recall.

PROCEDURES AND CONDITIONS OF THE INVESTIGATION

During the past four years a course in United States history has been required of all pupils in the seventh grade in the Laboratory Schools of the University of Chicago. In this course ten significant aspects and movements of the past constitute the major divisions of study. The purpose of this article is to report the results of an investigation which was undertaken in this course at the beginning of the school year 1930-31 to determine the comparative value of essay examinations and objective tests in measuring historical understanding and comprehension.

Pupils in two sections of the course were given five objective tests and five essay examinations while they were studying the fourth and fifth units of learning, and records were kept of the scores. The understanding sought in the fourth unit, "How We Secured Our National Government," and the understanding sought in the fifth unit,

"How Our National Government Was Tested," were determined before instruction on the units was undertaken, and the test questions in the case of both the objective and the essay examinations were focused on these understandings. From their study of the fourth unit the thirty-eight pupils comprising the two sections were expected to understand that our national government is an outgrowth of experience in Colonial and Revolutionary times and that it derives its present form from a constitution drawn up by a convention of delegates from the various states and adopted by the American people. From their study of the fifth unit the pupils were expected to understand that during the first twenty-five years of its existence our national government was tested by serious difficulties which it successfully overcame.

An objective test and an essay examination were administered after the pupils had completed the study of each of the three divisions of the fourth unit and after they had completed the study of each of the two divisions of the fifth unit. Thus, five tests of each type were administered during the study of the two units. These tests, which were focused on the five divisions of the two units taught during the period of the investigation, will be referred to throughout this article as Objective Tests 1, 2, 3, 4, and 5 and Essay Tests 1, 2, 3, 4, and 5.

Each of the five objective tests consisted of five parts: first, a series of statements to be completed; second, two best-answer questions; third, a series of true-false statements; fourth, three matching questions; and, fifth, a series of correct-response questions. Each of the five essay examinations consisted of five questions of the following nature: first, a question of causal reasoning plus evaluation; second, a question of comparison or contrast plus evaluation; third, a question involving organization of materials; fourth, a question involving the application of a principle or definition; and, fifth, a question requiring selective recall. The tests were submitted to fifteen teachers of United States history for the purpose of making them comparable and equivalent, and any test which appeared to these teachers to be more difficult or less difficult than the others was revised or, when revision was impossible, was replaced by another test. Great care was taken to obtain the services of competent teachers of United States history to assist in the criticism and revision of the tests.

Certain criteria of an effective test which are suggested by Waples and Tyler¹ (validity, reliability, objectivity, practicability, and adequacy) were followed by the fifteen teachers in the evaluation of the tests.

A great deal more time was required to construct the objective tests than was required to construct the essay examinations, but the scoring of the essay tests consumed more time than the scoring of the objective tests. Two and one-half hours were required by the instructor to construct the five essay examinations. However, before these questions proved acceptable to the fifteen teachers who assisted in revising the tests, seven more hours of time were consumed. This expenditure of time is explained by the fact that an attempt was made to construct the essay examination so that the scoring should be as definite as possible. That is, questions were asked upon which, so far as possible, agreement could be reached as to what constituted complete and effective responses. The following questions are taken from the essay examinations which were used.

1. Do you think that the Second Continental Congress performed any duties that each Colony could not have performed for itself? Explain.
2. Was the War of 1812 more or less of a test for the new government than the tests of politics, neutrality, finance, law and order?
3. Who were the important leaders responsible for the successful manner in which the tests of the new government were met?
4. What made the people think that the proposed Bill of Rights would guard popular liberty against the central government?
5. Explain how President Washington obtained his first cabinet, mentioning the names of the cabinet members.

The care with which the essay examinations were made probably increased their reliability beyond that of the usual tests of this type. However, no more time was used than was necessary to construct defensible questions; certainly the construction of an essay examination in a few minutes, as is often done, cannot be justified. The time required by the instructor to construct the five objective tests was sixteen and one-half hours. Two additional hours were required by the teachers who assisted with the work before these tests were acceptable to all. Thus, eighteen and one-half hours were required for

¹ Douglas Waples and Ralph W. Tyler, *Research Methods and Teachers' Problems: A Manual for Systematic Studies of Classroom Procedure*, pp. 633-35. New York: Macmillan Co., 1930.

the construction of the five objective tests, and nine and one-half hours for the construction of the five essay examinations.

Both the objective and the essay tests were mimeographed. Since the five objective tests required fifteen pages and the five essay examinations less than five pages, the clerical assistance used in preparing the tests for pupil use was more than three times greater in the case of the objective tests than in the case of the essay examinations.

The amount of time used in giving the tests of both types was as small as was consistent with reliable measurement. The pupils were able to complete each of the objective tests in twenty minutes, while forty-five minutes were used by the pupils to complete each of the essay examinations. Since, on the average, the time in which each pupil completed each objective test was twenty-five minutes less than the time in which he completed the corresponding essay test, the use of the objective tests effected a saving of 4,750 minutes for the thirty-eight pupils on the five tests.

The scoring time of the two types of tests cannot be ignored. Five minutes were required by the instructor to mark each of the essay-test papers, while one minute of a clerk's time proved sufficient to score each of the objective-test papers. The saving of four minutes on each objective-test paper amounted to a saving of 760 minutes for the papers of the thirty-eight pupils on the five objective tests.

RESULTS OF THE INVESTIGATION

Correlations of tests with essay-test criteria.—The scores made on the essay test and on the objective test for each division of the two units were correlated with the total of the essay-test scores made by each pupil on the other four divisions of the units. For example, Essay Test 1 and Objective Test 1 were correlated with the total of Essay Tests 2, 3, 4, and 5; likewise, Essay Test 2 and Objective Test 2 were correlated with the total of Essay Tests, 1, 3, 4, and 5. It was recognized that the total of the essay-test scores made by a pupil on four divisions of the two units did not constitute a perfect criterion of his understanding. However, if it is true that an essay examination is a better instrument for measuring understanding than is an objective test, this total score should have some validity as a criterion of understanding, and the correlation between it and

an essay test should be higher than the correlation between it and an objective test. If this correlation is higher, there is reason to believe that an essay test measures certain learning products, one of which doubtless is understanding, better than does an objective test. If the correlation is not higher, it appears that an objective test is as good a measure of those very qualities measured by an essay test as is the essay test itself. The correlations of these two types of tests with the essay-test criteria are shown in Table I.

The correlations of the essay tests with the criteria are higher than the correlations of the objective tests with the criteria in the case of

TABLE I
CORRELATIONS OF ESSAY TESTS AND OBJECTIVE
TESTS WITH ESSAY-TEST CRITERIA*

Test	Correlation of Essay Test with Criterion	Correlation of Objective Test with Criterion	Essay-Test Criterion
1.....	.575 ± .073	.562 ± .075	2, 3, 4, 5
2.....	.386 ± .092	.532 ± .078	1, 3, 4, 5
3.....	.557 ± .075	.245 ± .102	1, 2, 4, 5
4.....	.689 ± .057	.353 ± .095	1, 2, 3, 5
5.....	.306 ± .097	.381 ± .093	1, 2, 3, 4

* This table is read as follows: The correlation of Essay Test 1 with the essay-test criterion (the sum of the scores on Essay Tests 2, 3, 4, and 5) is .575 ± .073; the correlation of Objective Test 1 with the same essay-test criterion is .562 ± .075.

Tests 1, 3, and 4, while the correlations of the objective tests with the criteria are higher for Tests 2 and 5. The difference in the correlations for Test 1 (.013) is insignificant. If this difference is disregarded, each type of test correlates higher on two of the divisions of subject matter. It may be concluded, therefore, that the learning products which entered into the essay-test criteria were measured practically as well by the objective tests as by the essay tests. If the essay-test criteria form valid measures of understanding, then the objective tests measured the degree of success with which individuals had achieved understanding of the various divisions about as well as did the essay tests on these divisions. While the data in Table I indicate a slight superiority for the essay test, there is no evidence of a clear-cut advantage for this type.

Correlations of tests with objective-test criteria.—At this point the question may well be raised whether the correlation of an essay test

with an objective-test criterion is higher or lower than the correlation of an objective test with the same criterion. If objective tests measure only memory and recall while essay tests measure understanding in addition to these two factors, as some critics contend, then the correlations between objective tests and objective-test criteria should be significantly higher than the correlations between essay tests and objective-test criteria. This conclusion follows when the meaning of the correlation coefficient is considered. "The correlation coefficient may thus be regarded as the ratio of the number of equally effective elements which two variables have in common to

TABLE II
CORRELATIONS OF ESSAY TESTS AND OBJECTIVE
TESTS WITH OBJECTIVE-TEST CRITERIA

Test	Correlation of Essay Test with Criterion	Correlation of Objective Test with Criterion	Objective-Test Criterion
1.....	.456 ± .087	.465 ± .085	2, 3, 4, 5
2.....	.428 ± .089	.551 ± .075	1, 3, 4, 5
3.....	.435 ± .089	.368 ± .093	1, 2, 4, 5
4.....	.473 ± .085	.517 ± .080	1, 2, 3, 5
5.....	.286 ± .100	.461 ± .086	1, 2, 3, 4

the total number of independent elements constituting each, or, more briefly, as the proportion of common elements or causes."²

The question of the correlation of essay tests and objective tests with objective-test criteria was investigated in the same general way that was followed in studying the correlation of tests of these two types with essay-test criteria. The objective-test criteria were secured by combining the objective-test scores on the various divisions in the same manner that was followed in forming the essay-test criteria. The essay and objective tests on each part of the two units were correlated with these criteria. The results are shown in Table II.

The objective tests show greater correlation with the criteria than do the essay tests in the case of Tests 1, 2, 4, and 5. The correlation of Essay Test 3 with the criterion is higher than the correlation of

² Karl J. Holzinger, *Statistical Methods for Students in Education*, p. 166. Boston: Ginn & Co., 1928.

Objective Test 3 with the criterion. In the case of Test 5 the difference in coefficients (.175) is probably significant. Little or no significance can be attached to the other differences. It appears that an objective test has a slightly higher correlation with an objective-test criterion than has an essay test, but the evidence is not particularly conclusive.

SUMMARY

In general, this study suggests that, when an essay test and an objective test are carefully made and when the scoring of the essay examination is kept as objective as possible, the tests have about equal merit in measuring the understanding of pupils in United States history. Such differences as are found in the correlations of tests of these two types with essay-test and objective-test criteria are in favor of the essay test as an instrument for measuring understanding. However, these differences are small and appear to be balanced by the time element involved in the use of the tests.

It was pointed out earlier in this article that, while the construction of the objective tests consumed more time than the construction of the essay examinations, the objective tests were administered in much less time and were in most instances easily scored by a clerk. The total time required to construct, administer, and score the objective tests was considerably less than the time consumed in the construction, administration, and scoring of the essay tests. Since the objective tests appear to measure understanding about as well as do the essay examinations and since their use conserves the time of the instructor and the class, the evidence indicates that objective tests have a legitimate place in the testing program in United States history in the seventh grade.

The writers are aware that the data here presented do not warrant a broad generalization. The conclusion would doubtless be more reliable had a larger number of pupils been used and had the investigation been carried on during the study of the entire course in United States history rather than during the study of only two units of the course. A more extended investigation in which the findings of this study were verified would be a valuable contribution to the field of testing.

THE FOLK HIGH SCHOOL AND OTHER RECENTLY DEVELOPED INSTITUTIONS IN GERMAN ADULT EDUCATION

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It is well known that Germany has undergone fundamental social and political changes since the World War. Important changes have also come about in the German educational system, not only in the activities of the various schools of elementary and secondary grade, and to a lesser extent in the university, but also in the extension of educational and cultural opportunities to the adult population.

The German folk high school (*Volkshochschule*) has come into prominence since the war, although as an institution it has existed for a considerably longer period. Several of the earliest folk high schools were modeled after the Danish folk high schools, but an institution of the character adapted to rural Denmark was not suited to the needs of many German industrial communities. Variations in the needs in different parts of Germany have caused the folk high schools to foster different interests in different parts of the country. As the number of such schools has increased, the amount of variation has increased. Alexander and Parker stated in their study that these schools numbered more than 250 in the whole of Germany.¹

For a more adequate understanding of the institution, a rather detailed examination should be made of the character and operation of a particular folk high school. A school established a few years after the war in a progressive educational community which offers a rather systematic attempt at adult education will be described in this article. The folk high school in Hamburg was founded by the law of March 31, 1919, "concerning the Hamburg University

¹ Thomas Alexander and Beryl Parker, *The New Education in the German Republic*, p. 217. New York: John Day Co., 1929.

and *Volkshochschule*.¹ The school was opened in the following summer. Its present constitution was adopted as a part of the law of February 4, 1921, regarding higher education (*Hochschulgesetz*). The pertinent sections of the *Hochschulgesetz* make the following provisions.

PART I

SECTION I

The system of higher education for the state of Hamburg is under the direction of the Board of Higher Education (*Hochschulbehörde*).

The system of higher education includes the university, the scientific institutes, the folk high school, and the series of technical lectures. . . .

PART 4

SECTION 46

The folk high school is for the education of the whole population. It guarantees to all citizens the possibility of an active participation in the cultural life of the nation. The folk high school is not a trade school.

SECTION 47

For the accomplishment of its undertakings, the folk high school (1) conducts lectures and field trips and (2) maintains discussion groups. Lectures and discussions are to be so organized as to insure a systematic education for the capable participants.

SECTION 48

At the head of the folk high school is a governing committee or board composed of the following members: (1) the director of the folk high school, (2) five representatives of teachers of the folk high school, (3) six representatives of participants or students of the folk high school, (4) a representative of each of the faculties of the university, (5) a representative of one of the scientific institutes which does not belong to one of the faculties of the university. . . .

SECTION 50

The teachers and lecturers of the folk high school are selected by the Board of Higher Education on the recommendation of the governing committee of the folk high school. . . .

SECTION 52

Anyone who is eighteen years old has in principle the right to participate in any of the courses or activities of the folk high school.

¹ *Volkshochschule Hamburg, Vorlesungen und Arbeitsgemeinschaften im Sommerhalbjahr, 1929*, p. 3. Hamburg: *Hochschulbehörde*, 1929.

Admission to particular lectures or discussion groups can, at the discretion of the governing committee, be made conditional upon previous participation in certain courses or activities of the folk high school.¹

That the extent to which the principles set forth in the school law are carried out in practice may be grasped, it is necessary to give certain statistics. In Table I² are presented data concerning the

TABLE I
NUMBER OF REGISTRATIONS AND WITHDRAWALS IN DIFFERENT FIELDS OF STUDY
IN HAMBURG FOLK HIGH SCHOOL DURING SUMMER SEMESTER OF
1928 AND DURING WINTER SEMESTER OF 1928-29

FIELD OF STUDY	NUMBER OF REGISTRATIONS		NUMBER OF WITHDRAWALS	
	Summer 1928	Winter 1928-29	Summer 1928	Winter 1928-29
Law, political science, political economy, and sociology.....	757	1,506	0	327
Philosophy, psychology, and religion..	799	1,167	30	120
Education.....	95	90	10	41
Language and literature (general)....	582	946	78	301
English language and culture.....	345	473	0	270
French language and culture.....	153	120	26	62
Music.....	188	226	0	23
Plastic arts.....	354	411	8	56
Mathematics.....	254	327	0	11
Geography, astronomy, and ethnology	112	231	0	0
Physics, chemistry, and engineering..	231	490	0	57
Biology, physiology, and hygiene....	248	259	0	56
Agriculture and horticulture.....	0	0	0	0
Total.....	4,028	6,246	152	1,324

registrations for two semesters in each of the different fields of study represented in the folk high school as well as the number of withdrawals from each field. This table shows that the total registrations during the winter semester were much more numerous than those during the preceding summer semester. In proportion to the number of registrations, the number of withdrawals during the winter semester was larger than the number of withdrawals during the summer semester. The difference in the number of registrations

¹ *Hamburgisches Gesetz- und Verordnungsblatt*, p. 65, No. 17, February 6, 1921, as reported in *Volkshochschule Hamburg*, pp. 9-11. Hamburg: *Hochschulbehörde*, 1929.

² The data for Tables I-V are adapted from data presented in *Volkshochschule Hamburg*, pp. 11-13, 16-35. Hamburg: *Hochschulbehörde*, 1929.

might indicate either a sudden growth in the popularity of the school or a seasonal character in its appeal. The fact that the number of withdrawals increased much faster than the number of registrations supports the second explanation. The difference between the registrations and withdrawals in winter and summer may have resulted in part from a seasonal character of employment whereby people have more leisure during the winter than during the summer. Moreover, with a group of the type reached by the folk high school, the seasonal variation in the length of the day in a northern country and the consequent variation in the attractiveness of outdoor activities may have been a significant factor.

The range of the courses offered in the folk high school and the distribution of registrations in the different fields are interesting. In both semesters studied the number of registrations in the general fields of psychology and social sciences was between one-third and one-half of all registrations. This fact reflects the social and cultural emphasis of the particular school considered. The fact that the plastic arts and the English language and culture occupied more prominent places than mathematics or any of the science groups further suggests emphasis on what are often called cultural interests as contrasted with trade interests. The distribution of the number of courses offered in different fields was roughly in keeping with the respective number of registrations, although there was somewhat greater differentiation of courses among the sciences than the registrations in these courses would seem to justify. Data on the distribution of the courses for the two semesters indicated in Table I are not available, but the data for the summer semester of 1929 may be used as a rough index. These data appear in Table II.

In the 1928 summer semester 1,603 men registered in 2,198 courses and 1,407 women registered in 1,830 courses. Table III shows the distribution of these registrants according to the number of courses taken. This table indicates that the persons registering for courses in the folk high school were rather equally divided between the sexes, that more than two-thirds of these persons registered for only one course, and that only about one-seventeenth registered for more than two courses.

It is commonly maintained that the folk high school is intended

to foster cultural interests among adults who have had limited educational opportunities. Moreover, it is stated in section 52 of the Hamburg *Hochschulgesetz* that in principle the folk high school of that state shall be open to anyone over eighteen years of age. It is therefore of interest to examine the age distribution of the persons

TABLE II

NUMBER OF COURSES OFFERED IN VARIOUS FIELDS OF STUDY IN HAMBURG FOLK HIGH SCHOOL DURING SUMMER SEMESTER OF 1929

Field of Study	Number of Courses Offered
Law, political science, political economy, and sociology . . .	31*
Philosophy, psychology, and religion	21
Education	3
Language and literature (general)	23
English language and culture	9
French language and culture	4
Music	8
Plastic arts	9
Mathematics	5
Geography, astronomy, ethnology	7
Physics, chemistry, and engineering	13
Biology, physiology, and hygiene	15
Agriculture and horticulture	1
Total	144†

* In some cases one course is listed under two different fields of study. Duplicates are eliminated in the total.

† The list includes fourteen lectures in the different fields which are open to the public and for which the tuition fee is not charged.

registered as well as the distribution according to vocation. Table IV presents the distribution of registrants according to age and sex.

The distribution according to the age of registrants is slightly different for the sexes. In each of the first three age groups the number of men slightly exceeds the number of women, whereas the reverse is true of the last three age groups. On the basis of the totals for the two sexes, one might expect the number of men to exceed the number of women in all age groups. At least a partial explanation of the discrepancy between expectation and actuality is to be found in the influence of the war in producing an excess in the number of women over the number of men in the population which fall

in the last three age groups. The relatively small percentage of the registrants over thirty-five years old suggests that the intellectual interests and habits of persons who might be reached by the folk high school are rather definitely formed before they reach that age.

TABLE III
DISTRIBUTION OF 1,603 MEN AND 1,407 WOMEN ENROLLED
IN HAMBURG FOLK HIGH SCHOOL DURING SUMMER
SEMESTER OF 1928 ACCORDING TO NUMBER OF COURSES
TAKEN

Number of Courses Taken	Number of Men	Number of Women	Total
1.....	1,160	1,085	2,245
2.....	337	253	590
3.....	73	46	119
4.....	21	15	36
5.....	11	7	18
6.....	1	1	2
Total.....	1,603	1,407	3,010

TABLE IV
DISTRIBUTION ACCORDING TO AGE AND SEX OF PERSONS REGISTERED IN
HAMBURG FOLK HIGH SCHOOL DURING SUMMER SEMESTER OF 1928

Age	Number of Men	Number of Women	Total	Per Cent
Under 18.....	94	68	162	5.38
18-20.....	319	193	512	17.01
21-25.....	478	337	815	27.08
26-35.....	430	434	864	28.71
36-45.....	172	208	380	12.62
Over 45.....	110	167	277	9.20
Total.....	1,603	1,407	3,010	100.00

The distribution of registrants according to vocation appears in Table V. In the case of both sexes more of the persons taking courses in the folk high school were engaged in clerical and similar lines of employment than were engaged in other vocations. In view of the fact that in society clerical workers are less numerous than laborers, the Hamburg folk high school is apparently not reaching the laborer to the extent that a reading of section 46 of the *Hochschulgesetz*

might lead one to expect. Apparently, few men without definite vocations are interested in cultural improvement of the character fostered by the folk high school. A partial explanation for the difference between men and women in this respect might be that a large number of married women normally follow no vocation aside from that of housewife and hence direct their interests toward the folk high school.

The register of instructors¹ shows that the 144 courses listed in Table II were given by 101 instructors, of whom 49 had the Doctor's

TABLE V

DISTRIBUTION ACCORDING TO VOCATION OF PERSONS REGISTERED IN HAMBURG
FOLK HIGH SCHOOL DURING SUMMER SEMESTER OF 1928

VOCATIONS	MEN		WOMEN	
	Number	Per Cent	Number	Per Cent
Laborers, craftsmen, seamstresses, household employees, etc.....	521	32.50	145	10.31
Clerical and office employees, telephone operators, etc.....	856	53.40	619	43.99
Independent professions or vocations, such as teachers, students, artists, etc.....	216	13.48	254	18.05
No vocations.....	10	0.62	389	27.65
Total.....	1,603	100.00	1,407	100.00

degree in the fields of their special interests. Fifteen additional instructors held the rank of professor. The meeting places for the groups taking the 144 courses were distributed as follows: secondary schools, 70; lecture rooms of the university, 23; trade schools, 13; technical laboratory for teachers, 8; museums, libraries, special reading rooms, 8; botanical garden and institutes, 5; other scientific institutes, 2; all other locations, 15.

It seems, then, that the folk high school in Hamburg is, to some extent at least, meeting a need in adult education which is not met by other agencies. However, the total number of registrants is somewhat smaller than might have been expected in a state such as Hamburg, and one might hope that representatives of the lower vo-

¹ Data compiled from *Volkshochschule Hamburg*, pp. 14-35. Hamburg: *Hochschulbehörde*, 1929.

cational groups would be reached in greater numbers than is indicated in the study. The character of the subject matter given and its rather systematic organization may offer a partial explanation of the somewhat limited appeal of this school. In view of the distribution of the meeting places for different groups, geographic inaccessibility to classrooms can hardly be important in reducing the registration. Moreover, in view of the fact that a great many classes meet in the evening, the time element cannot be called a hindrance to participation in the courses offered.

TABLE VI
DISTRIBUTION ACCORDING TO FIELD OF SPECIALTY OF FREE AND
TUITION LECTURES OF TECHNICAL SERIES IN HAMBURG
DURING SUMMER SEMESTER OF 1929*

Field of Specialty	Free Lectures	Tuition Lectures
Mathematics and natural science	3	16†
Engineering	3†	8
Theory of heat and machine technology	2	6
Transportation	4	6‡
Electrotechnics	2†	10
Architecture	1	7
Language and economics	2	9
Total	15	56

* Data taken from *Technisches Vorlesungswesen zu Hamburg, Verzeichnis der Vorlesungen und Übungen im Sommerhalbjahr, 1929*, pp. 7-21. Hamburg: Auer & Co., 1929.

† Includes one duplicate.

‡ Includes two duplicates.

§ Includes four duplicates.

In section 1 of the *Hochschulgesetz* reference is made to a series of technical lectures. These lectures are also under the direction of the Board of Higher Education. Some of the lectures are free, but for most of them a fee of from one to ten marks¹ is charged. In addition, a fee for materials is charged in courses involving the use of supplies. The seventy-one lectures offered during the summer semester of 1929 were given by fifty-four instructors, who had an average training comparable to that of the teachers in the folk high school. Table VI shows the distribution of free and tuition lectures in the different technical fields. Apparently, the series of technical lectures

¹ One dollar is equivalent to approximately 4.15 marks.

attempts to do in highly specialized technical fields what the folk high school attempts to do in fields of more general cultural interest.

ITEMS FROM THE PROPOSED BUDGET OF STATE
OF HAMBURG FOR 1929^{*}

Board of Higher Education:

A. General expenditures M.4,358,440

B. Special expenditures for scientific institutes:

Hamburg archives for inter-

national economics M.82,800

State and university library . . 154,200

Ethnological museum 59,000

Museum of the history of

Hamburg 36,500

Art gallery 95,000

Industrial-arts museum 57,000

Astronomical observatory . . . 39,000

State institute of physics . . . 20,000

State institute of chemistry . . 29,000

State institute of mineralogy
and geology 12,000

State institute and museum of
zoölogy 31,500

State institute of botany . . . 65,300

Total 681,300

C. University of Hamburg 2,727,600

D. Folk high school 154,000

E. System of technical lectures 87,600

Total for Board of Higher Education M.8,008,940

Opera 1,816,000

Philharmonic society 723,000

Public loan libraries 269,000

The folk high school and the series of technical lectures may be the most systematic methods by which the state participates in the general field of adult education, but they are not the only methods. Extensive state subsidies are made for opera and philharmonic pro-

^{*} *Entwurf des hamburgischen Staatshaushaltsplanes für das Rechnungsjahr, 1929*, pp. 36, 186. Hamburg: Lütcke & Wulff.

ductions. Large public expenditures are made for the central library, for numerous loan libraries, and for several museums which function in adult education. While no detailed treatment of these institutions will be given, an understanding of the scope and significance of the activities considered may be gained through a comparison of the amount allowed in the budget for these activities with the amounts allowed for certain other activities. Because a large proportion of all the expenditures of the Board of Higher Education is listed under the heading of "general expenditures," which are distributed over several institutions in addition to those considered in this article, a brief summary of the expenditures for the various institutions under the direction of this board seems desirable. Expenditures for certain other educational and cultural services are also indicated in the statement of items from the proposed budget of the state of Hamburg for 1929 which is given on page 704. All expenditures are given in marks.

The amounts included in a budget for particular items will vary from year to year, but certain significant facts are revealed by the statement given. The proposed budget for 1929 indicates that the amount spent by Hamburg on its university, aside from the portion of the "general expenditures" which is spent for its activities, is but little greater than the combined expenditures for opera and philharmonic productions. The expenditure for the folk high school is small in comparison with the expenditures for the university and for the opera and philharmonic productions, although it is approximately the same as the expenditure for the state and university library. It is interesting to note that nearly twice as much is spent on public loan libraries intended primarily to provide popular reading, of which there are seven located in different parts of Hamburg, as is spent on the state and university library.

In summary, it may be said that the systematic attempt made by the folk high school in the field of adult education and, to a somewhat less extent, by the series of technical lectures (which is likewise under the direction of a state board) indicates the feeling of a public duty in the field. The feeling of public duty is further indicated by the less systematic but much more extensive cultural serv-

ice of the opera and philharmonic society. The fact that more is spent for loan libraries located in different parts of the state than is spent for the central state and university library suggests a state interest in popular reading. The kinds of services for which public funds are granted in the general field of adult education—such as providing opera, concerts, general reading, and opportunities to visit museums—indicate emphasis on the so-called “cultural” aspects of adult education as contrasted with trade aspects. The folk high school, in emphasizing its cultural aim in adult education, is apparently reflecting a current social philosophy which is also reflected through other agencies. The fact that the art gallery and the different museums listed are included under the division of government concerned with higher education is in keeping with the cultural aim indicated. Apparently, the state does not hesitate to subsidize private agencies that are carrying on educational activities considered socially desirable, and the state permits its public-school buildings to be used widely for activities that are not strictly concerned with the public-school function.

Educational Writings

REVIEWS AND BOOK NOTES

The secondary schools of utopia.—Philosophical writings are commonly confined to exposition of more or less abstract principles and to criticism of contemporary institutions in the light of such principles. Seldom do we have a theorist daring to attempt the rounded portrayal of his ideal society. In Professor Snedden's little volume¹ describing American secondary schools as he would have them in 1960, we are given a commendable example of this rare literature. It is a detailed drawing of an educational structure to show the institutional realization of the author's philosophy, not merely a hazy sketch for other workers to fill in.

To achieve desirable detachment, the book is written to simulate the report of a Chinese commission sent to investigate American schools. The school system is shown as existing in a society no less complex than that of 1931 but with larger social controls to utilize scientific techniques, govern production, diffuse prosperity, and attain the elements of human welfare for all. With home and community life made richer and therefore more soundly educative for the young, "very few Americans now send their children under nine years of age to school" (p. 9). "Attendance on full-time schools of general (interpreted as strictly non-vocational) education is compulsory throughout the United States from the tenth to the eighteenth birthday for all" (p. 8). From eighteen to twenty-five, full-time attendance on some type of vocational school is required of all during a specified number of weeks, and a comprehensive scheme of such schools is outlined. A most significant concept is that of the complete elimination of the vocational aim and the college-preparatory function from high-school education. To the realization of "really functional cultural and civistic attainments" (p. 13) the program of the high school is directed.

In this manner Snedden has given concrete exemplification to his view of many leading issues in education. He visions a school in which "performance powers" and "appreciational objectives" (p. 21) are sharply distinguished, in which school requirements and offerings are systematically related to extra-school educations, and in which "needed cultural and civic uniformities on the

¹ David Snedden, *American High Schools and Vocational Schools in 1960*. New York: Teachers College, Columbia University, 1931. Pp. vi+122.

one hand" are clearly differentiated from "enriching diversities" (p. 24) on the other. The practical operations of various "key principles" are elucidated; the offerings for physical well-being, for cultural and for socializing educations are described; "the subjects" of 1960 are compared with "the subjects" of 1930. Much of the description is liberally sprinkled with hypothetical illustrations.

Obviously, such a work is subject to volumes of criticism. The author invites "critical examination and especially adverse comment" (p. iii). The reviewer wishes to suggest, however, that the cause of education will best be served if other educational philosophers will offer in similar detail their own ideal systems of schools and then point out wherein they differ from Snedden.

The book can be read with genuine profit by all members of the teaching profession. Much of our educational literature is devoted to the taking of soundings and the measurement of drift; here is an attempt to give positive, telic direction to educational movement.

PERCIVAL W. HUTSON

UNIVERSITY OF PITTSBURGH

Real help for teachers of secondary-school mathematics.—A frequent criticism of many books which purport to offer help in the solution of problems of classroom practice is that they are too theoretical. The criticism does not apply to a recent contribution¹ to the literature on the teaching of mathematics in the high school. The book reveals the author's knowledge of, and many contacts with, the high-school classroom.

The author begins his book with a tabulation of problems which he has found in the literature. Twenty-three relate to arithmetic, twenty-nine to algebra, and twenty-six to geometry. Then follow chapters on arithmetic, the concepts of mathematics, the various phases of algebra, and one chapter each on intuitive geometry, demonstrative geometry, solid geometry, and trigonometry.

The book has several important merits. It is based on experimental research, but the results are organized systematically and are translated into usable classroom techniques. For each topic there is a rather complete, but unannotated, bibliography. In the case of problems which have not been scientifically investigated the author makes his own recommendations. The present state of the science of education makes such recommendations seem very desirable in a book which will be used as a textbook in many teacher-training institutions and as a handbook and guide by many teachers in service. In some cases the author presents several different procedures for teaching a given topic and discusses the merits and demerits of each. Techniques are discussed in systematic fashion. For example, in discussing the teaching of loci the author mentions four distinct steps which the teacher should follow. Finally, the author shows genuine insight into the working of children's minds while learning and shows a splendid familiarity with the psychology of learning.

¹ Ernst R. Breslich, *Problems in Teaching Secondary-School Mathematics*. Chicago: University of Chicago Press, 1931. Pp. viii+348. \$3.00.

A criticism which might be made of the book is the author's frequent references to his own textbooks. A hasty count shows 156 footnote references of this kind. The references are intended, of course, to be illustrations of the teaching procedures recommended, but they will limit the usefulness of the volume for instructors who prefer not to be placed in a position of seeming to recommend any one textbook or series of textbooks to their students.

A question which has to do with Professor Breslich's position relative to "correlated mathematics" will occur to those who have followed his writings. The term is not found in the book, and neither is a discussion of correlated mathematics found. The chapter organization would almost indicate the author's abandonment of his earlier position on this question. However, it is evident that he thinks of mathematics as a unitary thing. Many of his recommendations on the teaching of algebra involve the use of geometric concepts, and in his discussion of the teaching of geometry he frequently advises the use of algebraic processes and techniques.

In conclusion, it should be said that, although the author does not waste space quoting from the report of the National Committee on Mathematical Requirements, he accepts most of the important recommendations of that committee.

H. E. BENZ

OHIO UNIVERSITY, ATHENS, OHIO

Public education in North Carolina.—An adequate history of education in the United States cannot be written until certain special phases of our educational history have been subjected to comprehensive investigation. For example, an exhaustive history of education in each of the several states would go far toward laying the foundation for a comprehensive history of education in the country as a whole. It is gratifying to note that within the past few years more attention has been given to the investigation of certain well-defined aspects of the history of American education, notably to state histories of education.

The author of the volume under review¹ attempts to trace the history of the public schools of North Carolina from their earliest beginnings to the close of the nineteenth century. The book is divided into six parts. Part I gives an account of the slow crystallization of public sentiment in favor of public education and traces in some detail the various plans and efforts to establish a state system of education. It ends with a discussion of the enactment and the provisions of the first common-school law, the Act of 1839. This law laid the basis of what was, no doubt, the most advanced system of public schools in any of the southern states prior to the Civil War. Parts II and III are devoted to an account of the organization and development of a state school system during the two decades following 1841. Attention is given to such matters as administrative organization, methods of school support, efforts to provide trained

¹ M. C. S. Noble, *A History of the Public Schools of North Carolina*. Chapel Hill, North Carolina: University of North Carolina Press, 1930. Pp. xiv+464. \$3.00.

teachers, school buildings and grounds, and the development of the curriculum. Part IV tells the story of the efforts to keep the schools open during the trying Civil War period. Part V traces the history of the public schools during the hectic days of reconstruction. Part VI describes the slow development of a public-school system from 1877 to the close of the century. A second volume will bring the history of the public schools down to the present.

The book is not without defects. The author seems to have been unable to detach himself thoroughly from his story. Consequently, in places the story is rather personal and subjective. A considerable amount of space is devoted to matter of no great consequence which should have been subordinated or omitted altogether. The organization of the book leaves much to be desired. Perhaps the most serious criticism is that the history of the public schools is not adequately projected against the broader background of the social and economic history of the state. The book, nevertheless, has a great deal to recommend it. Much valuable information is given, and the reader cannot fail to secure an insight into the long and painful struggle of the people of North Carolina to establish a system of public schools.

NEWTON EDWARDS

A new approach to industrial home-mechanics content and its subsequent testing.—The validation of the content of shop courses is unique to industrial teachers and to administrators of the general school unit. A recent monograph¹ offers a logical procedure for determining the validity of home-mechanics courses. Results of this study show that many so-called home-mechanics courses are not attempting to train boys to be more efficient members of the family group. The expression "home mechanics" suggests this objective. Generally accepted educational objectives suggest that such service should be rendered. A list of validated home-mechanics jobs, efficiently taught, offers the detailed and specific service indicated in the term "worthy home membership." Little meaning accompanies general objectives that are no more than educational platitudes. The learning units should be defined and validated.

The first two chapters of the monograph are devoted to the method used in validation. A job analysis of practical work around the home and a subsequent survey to check the analysis were made. Household and garden tools, practical mensuration, modern conveniences, and care of home and grounds were included in the general classification of 382 practical jobs. The jobs adapted to shop instruction were selected and presented for checking to one hundred home owners of the Middle West. Study was also made of commercial job sheets and of several courses of study in large cities. Comparison was made of these studies by selecting the seventy-two highest ranking jobs.

¹ Louis Vest Newkirk, *Validating and Testing Home Mechanics Content*. University of Iowa Studies in Education, Vol. VI, No. 4. Iowa City, Iowa: University of Iowa, 1931. Pp. 40.

The remaining five chapters are devoted to testing the content of home-mechanics courses. Correlations were made between the Newkirk-Stoddard Home Mechanics Test and the Otis Group Intelligence Test, the Stenquist Mechanical Aptitude Test, and teachers' marks. The data indicate that, if a pupil makes a high score on the Newkirk-Stoddard test, he has also mechanical intelligence, a high intelligence quotient, and a knowledge of a large number of validated home-mechanics jobs. Little positive correlation exists between the Stenquist test and the Newkirk-Stoddard test. Both these tests give a low positive correlation with the intelligence quotient. There is, however, a significant positive correlation between Newkirk-Stoddard scores and teachers' marks.

The book is a paper-bound volume composed of seven short chapters. It contains much that should be of interest to the administrator of the junior high school and to shop teachers in general. Much commendation and little criticism can be offered to the author of this worthy study. The work might be extended to include even more cases from which to arrive at validation and to include a larger territory than the Middle West. Some apprehension appears in the probability that other shop teachers may not apply the suggested method of validation to the content of other industrial courses. However, here is a helpful guide for those who seek improvement in content and in testing.

VERNE C. FRYKLUND

UNIVERSITY OF MINNESOTA

A textbook in commercial law.—A new book in the field of secondary-school commercial law is on the market—a book which is strikingly different from the average high-school textbook in commercial law. This book¹ is built on the theory that law is not an end in itself but that it is only a part of a vast and closely interwoven fabric of social forms and patterns shaping the conduct of every individual. It includes in its subject matter the items commonly taught in such books, but it adds some sections of peculiar value, such as a discussion of the theory of property as well as the law of property, a discussion of the law of torts, a discussion of self-help or self-defense, a discussion of criminal law, a discussion of the steps in the handling of a legal case, and a chapter showing the obstacles in the way of the settlement of cases by appealing to the law. All these are of significant value to students of business.

The law is well presented, and clear and interesting illustrations are used to show how it applies; but, more important, an attempt is made in each case to tell the "why" of the law and to show how it has logically developed from the needs of the people. The book has an abundance of devices for making it teachable, such as questions and problems at the ends of the chapters and introductory statements and statements of objectives at the beginnings of the

¹ Jay Finley Christ, *Modern Business Law*. New York: Macmillan Co., 1930. Pp. xiv+612. \$2.00.

chapters. One of the objectionable features is that some of the problems seem to anticipate the subject matter of later sections of the book. From the standpoint of answering the questions, this plan is undesirable, but, from the standpoint of stimulating further study, it may be good. The chief objectionable feature is that the author in his very careful and exact statement of the law has tended to use a terminology which is not always simple enough and which may be beyond the comprehension of high-school pupils. If this fault were eliminated, the reviewer would say that this is the best textbook on commercial law for secondary schools now on the market.

UNIVERSITY OF IOWA

E. G. BLACKSTONE

Two books in one for classes in English literature.—The first conspicuous feature of a new textbook in English literature¹ is, according to the publisher, a combination of literary history and literary readings in a single volume. The professed aim has been to provide generous readings and closely correlated literary history for use in the last year of the senior high school. Approximately nine hundred pages are devoted to the readings (with interesting editorial introductions), and approximately two hundred pages—the last two hundred—are given over to a compact but simple and well-written history of English literature.

The organization of the readings is by periods, from the Anglo-Saxon age to the twentieth century, some attention being given to types within the periods. Of the 292 selections, only a few are abridged. The longest single reading is *Macbeth*, five full acts covering seventy-five pages being included. *Beowulf* is freely abridged (and wisely so) for high-school reading. Incidentally, one must commend the use of modern versions of the old English readings. Enough of the original is presented to provide a basis of comparison and give some understanding of the change which has taken place in the process of language growth.

The titles appearing in the index of readings are in the main those which are traditionally found in the school anthologies. The editors tell us, however, that "nothing has been included purely on the basis of tradition when . . . found wanting in genuine value and meaning to young people" (p. xiii). The modern period is richly represented by Hardy, Housman, Yeats, Kipling, Noyes, Masfield, Brooke, Chesterton, Barrie, Synge, Conrad, and others. This section of the anthology is probably the best for the development of genuine literary interest and enjoyment. It should win at once the sympathetic and appreciative attention of pupils and teachers.

In most senior high schools the character of the last-year survey course in literature is pretty well established. This new book assumes the more or less static condition of the course and sets out to supply a wealth of usable material.

¹ *Adventures in English Literature*. Edited by H. C. Schweikert and Others. New York: Harcourt, Brace & Co., 1931. Pp. xvi+1134. \$2.20.

The book is so organized as to serve best the teacher who wishes to make the study of literature pre-eminent in the course rather than the study of literary history, but the systematic historical treatment which follows the anthology, as well as the chronological arrangement of readings by periods, renders the book adaptable to the historical as well as the appreciational approach.

Implicit in the title "Adventures in English Literature" is the suggestion that new and enjoyable experiences await the pupil who undertakes the long book-journey which the editors have charted for him. One hopes devoutly that the book will justify its title. In the hands of a wise teacher, it probably will, but it is conceivable that the pleasurable anticipations aroused in the pupil's mind by the promise of "adventures" will pale rapidly before the usual array of study assignments. Literature which is chiefly to be "studied about" will not be a stimulating adventure to the average high-school class. In their prefatory comments the editors have clearly indicated their desire to "produce a book which will bring [young people and literature] together in affectionate rather than enforced relations" (p. xv). The editors have presented an excellent and liberal selection of material. The test of its use lies with the teacher.

ROY IVAN JOHNSON

HARRIS TEACHERS COLLEGE, ST. LOUIS, MISSOURI

A collection of poems.—A new collection of poetry¹ is much more than just another anthology of poetry. Its editor hopes that it will occupy a place of its own, and the reviewer hurries to say that he believes the volume is worthy of such a place, for it is most attractive in its selected content, in the tone and manner of its editor's comments, and in the attitude that is taken toward the place and uses of poetry in life both in and out of school. In the details of appearance and manufacture, too, the book is a happy relief from most of its kind; it is in no way stigmatized by "textbookishness." While the collection has been prepared with high-school and junior-college students chiefly in mind, it is a book which many a general reader would be happy to possess.

The organization of this collection is not unlike that of Wilkinson's *New Voices*. Mr. Lieberman opens each chapter with brief, but quite sufficiently full, comments that are interestingly pertinent to the variety of poetry the chapter is later to contain. These little essays are simply and pleasingly written. They serve successfully and in an unacademic fashion to introduce the reader to the poetry that follows. Taken together, these chapter introductions offer the reader a treatment of poetry that is at once sound and humanistic.

The editor is not concerned with time nor place in the arrangement of his selections. In most of the chapters are placed side by side poems which have been accorded the classic halo and poems written by recent and often too-little-known poets. Nor is geography allowed to separate from each other poems and

¹ *Poems for Enjoyment*. Edited by Elias Lieberman. New York: Harper & Bros., 1931. Pp. xxvi+510. \$1.40.

poets whose successful endeavor has been to interpret some phase of life of broad and general interest. Instead, Mr. Lieberman has placed in the various groups poems which are related to one another in form or theme or manner. This arrangement is as it should be and vindicates the title of the volume.

After a brief foreword, in which the anthologist tells us that "*Poems for Enjoyment* . . . treats poetry as a living art and not as a convenient object for literary dissection" (p. xvii), comes the first chapter in which poetry and prose are compared and contrasted as to "aim and spirit." Their likenesses and differences are admirably demonstrated by the quotation of prose excerpts and poems treating closely related or identical themes. Chapter ii contains sixteen poems the rhythms of which are easily recognizable and stimulating, preceded by a short and lively discussion of "The Music of Poetry." Chapter iii is devoted to the lyric. Chapter iv is given to narrative poetry. Of necessity, the relatively short narrative is emphasized. Chapter v concerns "Condensed Forms" and is made up of poems by contemporary writers with the exception of an interesting group of early Japanese verses. (One wonders why certain early Chinese poems were not included at this point.) Chapter vi is called "The Sonnet" and is restricted to illustrations of that form. "French Verse Forms" is the title of chapter vii. The poems in this group, however, are entirely American and English. An excellent collection of "Light and Humorous Verse" follows in chapter viii. "Free Verse," which is the subject of chapter ix, begins with two Psalms, leaps time to Walt Whitman, and concludes with Colum. Chapter x is given the somewhat falsely exclusive title of "Some Great Themes of Poetry." The variety of its content is indicated by its inclusion of Milton's "On His Blindness," Robinson's "Richard Corey," and Lindsay's "Abraham Lincoln Walks at Midnight." Chapter xi discusses "Creative Self-Expression" very satisfactorily and reprints a dozen excellent poems written by school pupils. This chapter will doubtless be of stimulative interest to both other pupils and their teachers. The final chapter offers the reader biographical sketches of the poets represented in the anthology and suggestions for further readings of their work. "Aids for Interpretation" of the collected poems form an appendix to the book.

One is delighted with the variety of material contained in *Poems for Enjoyment*. Here are poems for all types of young people. Appeal is made to widely divergent interests, capacities, and backgrounds, and yet there are few poems in the collection that are not worth knowing and enjoying by student or adult readers whose tastes and interests are catholic.

If one were disposed to quarrel, one might question certain of Mr. Lieberman's classifications and placements. One might fear, too, that overly great stress is laid on form in the erection of the categories. Following the editor's lead, might not the unwary teacher emphasize prosody far beyond its values for understanding and enjoyment? Mr. Lieberman, of course, would greatly regret any such result.

In reality the defects noted are of minor importance and worthy of only pass-

ing mention. In the hands of a teacher with a keen sense of proportion and with the ability and desire to adapt materials and emphasis to the interests and abilities of his pupils, *Poems for Enjoyment* will be found to be an exceptionally usable book. It would not be easy to name a better one.

HOWARD FRANCIS SEELY

OHIO STATE UNIVERSITY

Persons whom a selected group of secondary-school pupils consider leaders.— Since the report of the Committee of Eight of the American Historical Association, published in 1909, much emphasis has been placed on the personal element in history, especially in the grades below the sixth. In Grades IV and V the historical material has been organized mainly around outstanding leaders. Because of this heavy emphasis on persons in these grades, one would be led to expect that pupils in grades above the sixth would be somewhat familiar with a fairly large number of well-known leaders. Such an expectation, however, does not seem to be warranted, at least in certain localities. To substantiate this statement references may be made to a recent study of persons whom a selected group of high-school pupils think of as leaders.¹ The author of this study analyzed 2,216 papers written by junior and senior high school pupils in which were listed the names of the persons whom they considered leaders. The analysis revealed many striking facts, some favorable to the pupils and some unfavorable.

The procedure used to secure a list of names uppermost in the mind of each pupil was simple and very straightforward. The pupil was asked to comply with the following request: "List the names of twenty-five men and women whom you think of as leaders either in the past or at the present time. Tell why you think each has been or is a leader." Thirty minutes were allowed to comply with this request.

A total of 1,691 persons were listed by the 2,216 pupils who complied with the request. Seven pupils, four in Grade VII and three in Grade IX, were unable to list a single person. Eleven hundred and eighty-one of the 2,216 pupils were able to list twenty-five persons. One pupil listed fifty names. The twenty-five persons most often mentioned, in rank order beginning with the one most frequently listed, were: Abraham Lincoln, George Washington, Luther Burbank, Thomas A. Edison, Christopher Columbus, Theodore Roosevelt, Woodrow Wilson, Henry Ford, John J. Pershing, Benjamin Franklin, Calvin Coolidge, William Shakespeare, Ulysses S. Grant, Henry Wadsworth Longfellow, Napoleon Bonaparte, Robert Fulton, Alexander Graham Bell, Julius Caesar, Robert E. Lee, Eli Whitney, Thomas Jefferson, Guglielmo Marconi, John D. Rockefeller, Sr., Ignace J. Paderewski, and the Wright brothers.

Other interesting lists of twenty-five in rank order are included in the mono-

¹ L. A. Williams, *The Person-Consciousness of a Selected Group of High School Pupils*. University of California Publications in Education, Vol. VI, No. 2. Berkeley, California: University of California Press, 1931. Pp. 85-138.

graph. Space does not permit their inclusion here. However, inasmuch as no woman appears on the foregoing list, a rank-order list of twenty-five women named deserves inclusion in this brief review: Joan of Arc, Helen Keller, Helen Wills Moody, Betsy Ross, Florence Nightingale, Mrs. Ferguson, Clara Barton, Susan B. Anthony, Queen Elizabeth, Amelita Galli-Curci, Jane Addams, Harriet Beecher Stowe, Louisa M. Alcott, Queen Victoria, Mme Curie, Mary Pickford, Frances Willard, Mrs. Gene Stratton-Porter, Frances Warde, Mme Schumann-Heink, Mary Sybil Lewis, Susanne Lenglen, Mary Lyon, Rosa Bonheur, and Sarah Bernhardt.

The reasons the pupils gave for thinking of the persons on their lists as leaders varied greatly. One pupil turned in a paper containing the names of thirty-seven persons with an excellent reason why each is or has been a leader. Another pupil's paper contained the names of but fifteen persons, only two of which were accompanied with the reason for considering the person a leader. The inability to give reasons for greatness in the characters named was much in evidence in the papers. In a few cases the reasons given were both humorous and ludicrous.

A few of the outstanding facts revealed by the study are: (1) the marked tendency to emphasize political and military leaders and the slight attention given to women leaders, biblical characters, classical names, and motion-picture actors; (2) the lack of improvement in either number or quality of leaders selected by senior high school pupils over those selected by junior high school pupils; (3) the provincial character of the lists, local celebrities receiving undue attention; (4) the unexpectedly large number of pupils who failed to name twenty-five persons in the time allowed; and (5) the complete absence of women on the list of the twenty-five persons most often named.

R. M. TRYON

CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

- ANDERSON, LEWIS FLINT. *Pestalozzi*. New York: McGraw-Hill Book Co., Inc., 1931. Pp. x+284. \$2.00.
- CLAPP, FRANK L., CHASE, WAYLAND J., and MERRIMAN, CURTIS. *A Technique of Study To Accompany "Introduction to Education."* Boston: Ginn & Co., 1931. Pp. x+134. \$0.80.
- COMMISSION ON ENGLISH, THE. *Examining the Examination in English: A Report to the College Entrance Examination Board.* Harvard Studies in Education, Vol. XVII. Cambridge, Massachusetts: Harvard University Press, 1931. Pp. xvi+296. \$2.00.
- DAVIS, SHELDON EMMOR. *Teaching the Elementary Curriculum*. New York: Macmillan Co., 1931. Pp. xiv+550. \$1.75.

- EBAUGH, CAMERON DUNCAN. *The National System of Education in Mexico*. Johns Hopkins University Studies in Education, No. 16. Baltimore: Johns Hopkins Press, 1931. Pp. x+150. \$2.00.
- Graduate Theses in Education, 1927-1931*, Abstracts, Vol. I. Compiled by Carter V. Good, Walter L. Collins, and Chester A. Gregory. Cincinnati, Ohio: Teachers College, University of Cincinnati, 1931. Pp. xxvi+396.
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- MARSHALL, M. V. *Education as a Social Force: As Illustrated by a Study of the Teacher-Training Program in Nova Scotia*. Harvard Bulletins in Education, No. 18. Cambridge, Massachusetts: Harvard University Press, 1931. Pp. xxx+162. \$1.00.
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BOOKS PRIMARILY FOR HIGH-SCHOOL TEACHERS AND PUPILS

- ADAMS, JESSE E. *The Self-teaching Spelling Tablet: Book One (For Grades I and II)*, \$0.16; *Book Two (For Grades III and IV)*, \$0.16; *Book Three (For Grades V to VIII)*, \$0.16. Newark, New Jersey: Silver, Burdett & Co., 1931. \$0.52.
- ANDREWS, GEORGE GORDON, and ANDERSON, HOWARD RICHMOND. *Achievement Tests in World History Based upon Robinson, Smith, and Breasted's "Our World Today and Yesterday."* Boston: Ginn & Co., 1931. Pp. vi+90.
- BAILEY, D. C. (revised by E. T. Smith). *A New Approach to American History: Students' Guide Sheets*. Chicago: University of Chicago Press, 1931 (third edition). Pp. xiv+124.
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- terest Activities (A Statement of Current Practice), pp. xiv+136, \$1.00. New York: A. S. Barnes & Co., Inc., 1931.
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- FRIEDMAN, ROSE LOVENHART, ARJONA, DORIS KING, and CARVAJAL, ESTHER PÉREZ. *Spanish Book Two*. Chicago: Scott, Foresman & Co., 1931. Pp. xxxii+544. \$2.08.
- HILL, HOWARD C. *Fourteen Tests in Vocational Civics for Use with Hill's "Vocational Civics" and "Community and Vocational Civics" and Hill and Sellers's "My Occupation."* Boston: Ginn & Co., 1931. Pp. 28. \$0.16.
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- HILL, HOWARD C., and SELLERS, DAMON H. *My Community: A Workbook in Community Life*. Boston: Ginn & Co., 1931 (revised). Pp. vi+184. \$0.64.
- LECOMPTE, PEARLE. *Dramatics*. New York: A. S. Barnes & Co., Inc., 1931. Pp. xiv+164. \$1.00.
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